

EXHIBIT A

**LONDON COURT OF INTERNATIONAL ARBITRATION
(LCIA)**

Case No. 204661

Proyecto CCC Empalme I, S.A.P.I. de C.V.

v.

Federal Electricity Commission
FINAL AWARD

March 14, 2023.

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List of Abbreviations

General

Respondent, Commission or CFE	Federal Electricity Commission.
Claimant, Contractor or Empalme	Proyecto CCC Empalme I, S.A.P.I. de C.V., identified as the "Contractor" in the Contract defined below and therefore referred to as such in various reference citations.
LCIA	London Court of International Arbitration.
Public Works Law or LOPSRM	The Law of Public Works and Related Services published in the Official Gazette of the Federation dated January 4, 2000, as amended up to the date of the Contract defined below.
Rules	LCIA Arbitration Rules, effective beginning on October 1, 2014.

Contractual Framework

Provisional Acceptance	Provisional acceptance of the Power Plant by CFE, in accordance with Clause 18.1 of the Contract, after completion of the Works, upon conclusion of the physical verification of the Works by Empalme and CFE, in accordance with the scope and Specifications of the Contract, subsequent to the preparation of a detailed report with the results of the verification, including a list of the Minor Defects, if any (Clauses 1.1 and 18.1 of the Contract).
Provisional Acceptance Report	Detailed report prepared by CFE and Empalme dated March 26, 2019 upon completion of the verification of the Power Plant on the occasion of the completion of the Works, to record the results of the verification, including a list of the Minor Defects (Clause 18.1 of the Contract).
25.5 Agreement	Agreement between the Parties regarding the Application of Clause 25.5 to Comply with the Purpose of Contract PIF-017/2015, entered into by CFE and Empalme on January 16, 2019, with regard to the compensation to Empalme due to the delay in the Scheduled Provisional Acceptance Date, for reasons related to Governmental Force Majeure consisting of

restrictions of the National Energy Control Center (CENACE) to perform tests at 100% load.

Extension of the Warranty Period	Automatic extension of the Warranty Period, under the terms of Clause 20.4 of the Contract, in the event that the Power Plant is unable to generate electric energy due to a Defect or Flaw, for a period equal to the time the Power Plant, or the corresponding part thereof, cannot be used by the Commission.
Banorte Letter of Credit	Irrevocable standby letter of credit No. S002439 dated March 13, 2019, issued by Banco Mercantil del Norte, S.A., Institución de Banca Múltiple, Grupo Financiero Banorte charged to Empalme in the amount of USD 47,684,436.92 dollars, currency of the United States of America, as the same may be increased in accordance with the terms set forth therein, delivered by Empalme to CFE in accordance with Clause 11.1 b) of the Contract to guarantee the obligations of Empalme with respect to the repair of hidden defects or defects in the materials and works, as well as any other liability incurred by Empalme, derived from the Contract.
HSBC Letter of Credit	Irrevocable standby letter of credit No. SDNMLM550040 dated April 10, 2015, issued by HSBC México, S.A., Institución de Banca Múltiple, Grupo Financiero HSBC charged to Empalme in the amount of USD 47,684,436.92 dollars, currency of the United States of America, equivalent to 10% of the Price of the Contract, delivered by Empalme to CFE in accordance with Clause 11.1 a) of the Contract to guarantee to the latter the due, proper and absolute performance of the obligations that are the subject of the Performance Warranty defined below.
ICC	Refers to the International Chamber of Commerce (ICC).
Power Plant	The group of facilities and Equipment that form part of the scope of the Contract (Clause 1.1 of the Contract).
Provisional Acceptance Certificate	Certificate issued by CFE dated March 26, 2019 to establish the Provisional Acceptance of the Power Plant after the Provisional Acceptance Report was signed, which included a list of the Minor Defects, recording that, at the time of the issuance of

the Certificate, the care, custody and control of the Power Plant, as well as the risk of its loss, were transferred to CFE (Clauses 1.1 and 18.1 of the Contract).

Contract	Lump Sum Public Works Contract dated April 15, 2015, Contract No. PIF-017/2015, signed by the Federal Electricity Commission [Comisión Federal de Electricidad] and Proyecto CCC Empalme I, S.A.P.I. de C.V. on April 15, 2015.
Call for Bids	Call for bids for International Public Tender No. LO - O18TOQ054-T26-2014
Defect	Any fact, condition or event that affects the Works or any part thereof, which renders or is likely to render such Works incapable of fully or partially fulfilling their purpose or function (Clause 1.1 of the Contract).
Minor Defects or "MD".	There is no precise definition in the Contract; therefore, since the terms "deficiency" and "defect" are synonymous, it should be understood that they are those <i>defects</i> (i.e. " <i>deficiencias</i> ", as they are redundantly referred to in the Contract) in the Works performed with respect to the Power Plant, which do not need to be corrected as a condition for the issuance of the corresponding Provisional Acceptance Certificate, as long as they do not negatively impact the safety, reliability and operation of the Power Plant (Clauses 1.1 and 18.4 of the Contract).
Flaw	An event that fully or partially limits the generation capacity, efficiency or operational safety of the Plant, with respect to the Contract Specifications and which, if not remedied, may affect the optimal condition of the Plant (Clause 1.1 of the Contract).
MD-331	Minor Defect identified with that number by CFE in Exhibit 9 of the Provisional Acceptance Report, consisting of "HIGH VIBRATION in bearing 2 of the TV, vibration values were noted that exceed the alarm values when the speed is increased (values of 250 microns), and in the decrease it reaches values that are much higher than the trip value (values of 400 microns), at a speed of approximately 1800 rpm".
Bid Documents	Refers to the Call for Bids and its annexes, clarification meetings, addenda, Proposals, bid opening and Award records (Clause 1.1 of the Contract).

Contract Specifications	All Specifications, parameters and technical, engineering, construction and performance requirements for the Works, contained or referred to in the Contract or the Bid Documents, and in the event of a discrepancy between the applicable standards the more stringent standard shall prevail (Clause 1.1 of the Contract).
Provisional Acceptance Date	Date on which Empalme achieves Provisional Acceptance of the Power Plant, that is, March 26, 2019 (Clauses 1.1 and 11.2 of the Contract).
Performance Warranty [Performance Bond]	Empalme's obligation to perform all of its obligations under the Contract other than its obligations set forth in Clause 20.2, guaranteed by the HSBC Letter of Credit (Clause 11.1 a) of the Contract).
Operational Warranty [Operational Bond]	Empalme's guarantee that the Works related to the Plant, once Provisional Acceptance of the Plant has been achieved, will strictly comply with the Contract Specifications and will be manufactured and completed in accordance with Industry Standards in a technically efficient and complete manner, as well as the continued operation of the Works (Clause 20.1 of the Contract).
GBP or "£"	Refers to pounds sterling, the legal tender of the United Kingdom.
Works	Refers to the Plant, Materials, systems and services of whatever nature to be provided or performed by Empalme, which are specifically listed in the Contract or are within the scope of the Contract and are specified therein without limitation (Clause 1.1 of the Contract).
Warranty Period	Period commencing on the Provisional Acceptance Date of the Power Plant and ending on either: (i) the first anniversary of the Provisional Acceptance Date corresponding to the Power Plant; or (ii) the date determined in accordance with Clause 20.4 of the Contract, whichever occurs first (Clauses 1.1 and 20.4 of the Contract).
WC Management Procedure	Warranty Claims Management Procedure for the Combined Cycle plant established in accordance with Clause 20.1 of the Contract, which Empalme delivered to CFE on February 21, 2019.

Fifth Amendment Agreement	Fifth Amendment Agreement to the Financed Lump Sum Public Works Contract No. PIF-017/2015 dated March 4, 2019, <u>signed by CFE and Empalme for the purpose of acknowledging the time impacts suffered by Empalme and achieving the Provisional Acceptance of the Power Plant (Statement 4 of CFE in the Agreement in question).</u>
Warranty Claims or "WCs".	Defects resulting from the Works, due to hidden defects, and any other liability incurred by Empalme, under the terms set forth in the Contract and in the Federal Civil Code (Clause 20.1 of the Contract).
IBA Rules	Refers to the Rules of the International Bar Association on the Taking of Evidence in International Arbitration, approved on December 17, 2020 by resolution of the Council of that Institution.
"USD" or "dollars"	Refers to dollars, the legal tender in the United States of America (Clause 1.1 of the Contract).

Procedure (in chronological order)

Request for Arbitration	Empalme's Request for Arbitration, dated March 18, 2020.
Petition for Emergency Measures	Petition for Emergency Measures filed by the Claimant with the LCIA on March 26, 2020.
Extension of Petition	Extension of Emergency Measures, dated April 3, 2020.
Answer to the Petition for Emergency Measures	Answer to the Petition for Emergency Measures and Extension, dated April 6, 2020, filed by the Respondent.
Emergency Proceedings	Proceedings initiated by Empalme through a Petition for Emergency Measures dated March 26, 2020, filed by Empalme, which was resolved by means of the Award issued by the Emergency Arbitrator referred to below.
Emergency Arbitrator	Mr. José Rosell, appointed by the LCIA pursuant to Articles 5 and 9B of the Bylaws on April 2, 2020
Emergency Arbitrator's Award	Award rendered by the Emergency Arbitrator on April 15, 2020, in which the latter, subject to the decision of the Arbitral Tribunal once

it is created, (i) ordered CFE to refrain from making additional payment demands in connection with the HSBC Letter of Credit, as well as any act tending toward its enforcement; and (ii) suspended the demand dated April 2, 2020, submitted by CFE to Empalme, seeking payment by the latter of the HSBC Letter of Credit in the amount of USD 13,627,892.00 dollars, corresponding to the amount for which CFE enforced such Letter of Credit.

Answer to the Request for Arbitration	Answer to the Request for Arbitration, filed by CFE on April 24, 2020.
CFE's Pleading on Interim Measures	Pleading filed by CFE on September 21, 2020 with the Arbitral Tribunal in connection with the Interim Measures issued by the Emergency Arbitrator's Award, in order for the Arbitral Tribunal to rule on such measures and on an additional interim measure requested by Empalme in its pleading.
Empalme's Pleading on Interim Measures	Pleading filed by Empalme on September 21, 2020 with the Arbitral Tribunal in connection with the Interim Measures issued by the Emergency Arbitrator's Award, in order for the Arbitral Tribunal to decide on such measures and on an additional interim measure requested by Empalme in its pleading.
Empalme's Answer on Interim Measures	Memorial filed by Empalme on October 12, 2020, responding to the positions formulated by CFE in its Pleading on Interim Measures.
CFE's Answer on Interim Measures	Pleading filed by Empalme on October 12, 2020, responding to the positions formulated by Empalme in its Pleading on Interim Measures.
Statement of Claim	Statement of Claim filed by Empalme on February 11, 2021, at 0:06 A.M.
GPS Expert Report I	"Expert Report on the Delivery and Settlement of the Empalme I 296 CC Combined Cycle Electric Power Generation Project", dated February 5, 2021, submitted by Global Project Strategy Inc. (GPS), Exhibit AP-001 attached to the Statement of Claim.

Doosan Skoda	Doosan Skoda Power s.r.o., manufacturer of the steam turbine referred to in the Statement of Claim, Statement of Defense and other proceedings.
Turbopartes	Turbopartes y Servicios Especializados S.A. de C.V., contracted by CFE to perform shop work and assembly of the steam turbine, referred to in the Statement of Claim, Statement of Defense and other proceedings.
Statement of Defense	Statement of Defense filed by CFE on June 23, 2021 in answer to Empalme's Statement of Claim.
Expert Report of Eng. Cámara Anzures	"Empalme Project Expert Report I", dated June 21, 2021, submitted by Eng. Lorenzo José Cámara Anzures, Exhibit DP-001, attached to the Statement of Defense.
Report of Fatima Salas	"Draft of Response to Disputed Warranty Claims" dated June 2021 (sic), issued by M. in G.A. Fátima Karmina Salas Salmerón, CFE's expert witness, Exhibit 109 attached to the Expert Report of Eng. Cámara Anzures (Exhibit DP-001, attached to the Statement of Defense).
Empalme's Pre-Hearing Brief	Additional Pre-Hearing Brief filed by Empalme on November 29, 2021, in preparation for the Hearing.
GPS Expert Report II	"Expert Report for Empalme's the Additional Pre-Hearing Brief", dated November 25, 2021, submitted by GPS, Exhibit AP-002, attached to Empalme's Pre-Hearing Brief.
Appendix No. 01	GPS MD Technical Analysis (Minor Defects), dated November 25, 2021, an integral part of GPS Expert Report II.
CLUE Report or Lapee Report	"Technical Expert Report - Evaluation of Vibrations, Axial Displacement and Steam Turbine Works", dated November 29, 2021, issued by CLUE Consultancy (Chris Lapee or Expert Chris Lapee, Christiaan Jacobus Maria Lapee), Exhibit AP-003, attached to Empalme's Pre-Hearing Brief.
H2O Expert Report	"Expert Report – Biological Incrustation Root Cause Analysis" dated November 28, 2021, issued by H2O Biofouling Solutions Iberia S.L., Exhibit AP-004, attached to Empalme's Pre-Hearing Brief.

CFE's Pre-Hearing Brief	Additional Pre-Hearing Brief filed by CFE on November 29, 2021, in preparation for the Hearing.
Hearing	Arbitration hearing, held virtually using the Zoom platform on February 14, 15, 16 and 17, 2022, in which the Parties presented their respective cases, their experts presented the considerations relating to the opinion expressed in their respective expert reports, and the representatives of the Parties questioned the witnesses and experts of the opposing Party at their discretion.
Transcript	Final stenographic versions of each of the Hearing days, delivered on March 17, 2021 after review and agreement by the Parties.
Empalme's Closing Memorial	Memorial of Conclusions and Statement of Costs filed by Empalme on May 2, 2021, with the arguments and final conclusions related to its case, as well as the statement of costs incurred by Empalme as referenced in Article 28 of the Rules, and Empalme's claims in that regard.
CFE's Closing Memorial	Memorial of Conclusions and Statement of Costs filed by CFE on May 2, 2021, with the arguments and final conclusions related to its case, as well as the list of the costs incurred by CFE as referenced in Article 28 of the Rules, and CFE's claims in that regard.

**LONDON COURT OF INTERNATIONAL ARBITRATION
(LCIA)**

Case No. 204661

Proyecto CCC Empalme I, S.A.P.I. de C.V.
v.
Federal Electricity Commission

Pursuant to Article 26 of the LCIA Arbitration Rules in effect as of October 01, 2014 ("Rules"), applicable to the above arbitration, the Arbitral Tribunal issues the following:

FINAL AWARD

I. PARTIES AND THEIR REPRESENTATIVES

A. PROYECTO CCC EMPALME I, S.A.P.I. DE C.V. (hereinafter "Empalme" or the "Claimant").

The Claimant is represented by:

Eduardo Antonio Frías Valero	eduardo.frias@iepi.com.mx
Juan Vicente Ivorra García	juan.ivorra@sener.com.mx

All notices or communications to the Claimant shall be sent to the following representatives, whose contact details are as follows:

Rodrigo Zamora Etcharren	rzamora@galicia.com.mx
Santiago Oñate Yáñez	sonate@galicia.com.mx
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Elena Rivas Capelo

erivas@ohla-group.com

- B. FEDERAL ELECTRICITY COMMISSION (hereinafter "CFE", the "Commission" or the "Respondent").

The Respondent's legal representatives, as well as their respective contact information and the addresses to which all correspondence in this arbitration should be sent, are as follows:

Raúl Armando Jiménez Vázquez	raul.jimenez@cfe.mx
Georgina Velasco Zanella	georgina.velascoz@cfe.mx
Almudena Otero de la Vega	almudena.otero@cfe.mx
Ofelia López Melgar	ofelia.lopez@cfe.mx
Antonio Grayeb Cervantes	antonio.grayeb@cfe.mx
Atenas Sebastian Zepeda	atenas.sebastian@cfe.mx
Norma Mireles Frago	norma.mirelesf@cfe.mx
Martha Alicia Magdaleno Medina	martha.magdalen@cfe.mx
Carlos Alberto Bejarano Torres	carlos.bejarano@cfe.mx

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II. ARBITRAL TRIBUNAL

1. Pursuant to the arbitration agreement transcribed below, contained in Clause 30.3 of the Lump Sum Public Works Contract dated April 15, 2015, entered into by PROYECTO CCC EMPALME I, S.A.P.I. DE C.V. and the FEDERAL ELECTRICITY COMMISSION [COMISIÓN FEDERAL DE ELECTRICIDAD] (the "Contract"), in the Request for Arbitration dated March 18, 2020 the Claimant designated an arbitrator candidate; and the Respondent, in turn, in its Answer to the Request for Arbitration dated April 24, 2020 designated Dr. Oscar Vásquez del Mercado Cordero as arbitrator. Subsequently, by means of an email dated June 1, 2020, the LCIA informed the parties that the arbitrator appointed by the Claimant had decided to decline his acceptance to form part of the Arbitral Tribunal; and consequently, by means of an email dated June 12, 2020, the Claimant appointed Mr. Eduardo Siqueiros Twomey as arbitrator.

2. Subsequently, in an exchange of correspondence between the parties and the LCIA dated June 30, 2020, the parties agreed on a mechanism for the appointment of the president of the Arbitral Tribunal, pursuant to which, by means of the veto and ranking system agreed upon in that mechanism, Mr. Fernando Estavillo Castro was appointed to act as presiding arbitrator of the Arbitral Tribunal, and the co-arbitrators informed the Parties and the LCIA of that decision by means of an email dated July 21, 2020.
1. By virtue of the foregoing, pursuant to Article 5 of the Rules and in accordance with Clause 30.3 of the Contract, the LCIA appointed the following individuals as arbitrators:¹

Eduardo Siqueiros Twomey, Arbitrator
ARB-INTER, S.C.
Paseo de los Tamarindos No. 50-PB
Bosques de las Lomas, Alcaldia Cuajimalpa
Ciudad de Mexico, C.P. 05120
Mexico

Oscar Vásquez del Mercado Cordero, Arbitrator
Bosque de Yuriria 82
Fraccionamiento La Herradura, Segunda Seccion
Huixquilucan, C.P. 52784,
Mexico

Fernando Estavillo Castro, President fernando.estavillo@estavilloarbitraje.com
Estavillo Arbitraje
Avenida Santa Fe 94, Torre A, Piso 8
Colonia Zedec Santa Fe
Alcaldia Álvaro Obregón
Ciudad de Mexico, C.P. 01210 Mexico.

2. The LCIA communicated the above to the Parties on July 28, 2020² and the Parties did not raise any objection to the appointment of the arbitrators after the Tribunal was created. Additionally, in Chapter II of Procedural Order No. 1 dated August 31, 2020, signed by the representatives of the Parties and the members of the Arbitral Tribunal, the Parties expressly confirmed the composition of the Arbitral Tribunal and its jurisdiction to hear and rule on the case, stating that they have no objection to the appointment of the arbitrators and their confirmation.

¹ Letter from the Vice President of the LCIA dated July 27, 2020.

² LCIA communication dated July 28, 2020.

III. CASE MANAGER

5. Pursuant to Clause 30.3 of the Contract, the Case Manager is:

The London Court of International Arbitration (LCIA)
1 Paternoster Lane, London, EC4M 7BQ
+44 (0) 20 7936 6200

IV. ARBITRATION AGREEMENT

6. The Contract entered into by CFE and Empalme contains an arbitration agreement in its Clause 30.3, with the following terms:

*" 30.3 **Arbitration.** All disputes arising in connection with this Contract, other than disputes which must be resolved pursuant to Clause 30.2, shall be decided exclusively and finally in accordance with the Arbitration Rules of the London Court of International Arbitration, by 3 (three) arbitrators; one selected by each of the Parties; the third arbitrator shall be appointed by the Parties or by the arbitrators already appointed and in the absence of an agreement by the London Court of International Arbitration (hereinafter referred to as LCIA). The arbitrators shall preferably have knowledge of Mexican law. The seat of the arbitration shall be Mexico City, Federal District, and the arbitration shall be conducted in Spanish. The Applicable Law to the merits of the arbitration and, in a supplementary manner where the LCIA Arbitration Rules are silent, shall be the one stipulated in Clause 30.1. As to procedure, if the Rules of the London Court of International Arbitration are silent, such rules as the Parties or, in the absence thereof, the Arbitral Tribunal may determine shall apply. The arbitration proceedings shall be confidential and any Person participating in the arbitration proceedings shall maintain confidentiality. The foregoing confidentiality shall be maintained as long as an Authority with jurisdiction does not require disclosure under the Applicable Law. It is understood that the Arbitral Tribunal shall accept as binding the decisions - if any - of the Expert with respect to technical or administrative matters within the limits of such Expert's mandate."*

V. APPLICABLE LAW

7. Pursuant to Clause 30.1 of the Contract (Applicable Law), the Contract shall be governed by and interpreted in accordance with the Law of Public Works and Related Services (LOPSRM) and other Mexican Federal Laws.

VI. LANGUAGE OF THE ARBITRATION

8. Pursuant to Clause 30.3 of the Contract, the arbitration shall be conducted in Spanish.

VII. SEAT OF THE ARBITRATION

9. Pursuant to Clause 30.3 of the Contract, "... *The seat of arbitration shall be Mexico City, Federal District...*", currently known as Mexico City.

VIII. BACKGROUND

Request for Arbitration

10. Empalme initiated the proceedings by means of a Request for Arbitration ("Request for Arbitration") dated March 18, 2020, in which it set forth the following claims:³

“

- A. *Order CFE to pay all amounts and concepts claimed by EMPALME in these arbitration proceedings, including the amounts withheld by CFE, as well as interest and other corresponding accessory costs.*
- B. *Issue the corresponding declarations confirming the inadmissibility and absence of merit of any claim formulated by CFE against EMPALME.*
- C. *Issue the corresponding declarations confirming the nonexistence of any breach by EMPALME.*
- D. *Issue the corresponding declarations obligating CFE to refrain from exercising any contractual right tending to the payment of any amount claimed by CFE from EMPALME for any alleged breach.*
- E. *Issue the declarations and rulings that EMPALME requests in this request, as well as those that it may later specifically request, all aimed at resolving the merits of the disputes that are the subject of this arbitration in favor of EMPALME.*
- F. *Order CFE to compensate EMPALME for any additional declaratory action or judgment, breach, damages, prejudice, interest, etc. arising from the facts and claims that are the subject of this Request for Arbitration or those that EMPALME may add in the future."*

Emergency Proceedings

11. On March 26, 2020, Empalme filed a Petition for Emergency Measures ("Petition for Emergency Measures") with the LCIA pursuant to Article 9B of the Rules.⁴

³ Request for Arbitration, pages 8 and 9.

⁴ Letter from Empalme dated March 26, 2020.

12. The LCIA appointed Mr. José Rosell ("Emergency Arbitrator") as the Emergency Arbitrator pursuant to Articles 5 and 9B of the Rules and notified the Parties on April 2, 2020.⁵
13. On April 3, 2020, the Emergency Arbitrator invited the Parties to inform him of the date on which each Party suggested filing its respective Memorial.⁶
14. The Claimant submitted its proposal on the same day and announced the filing of an Extension to the Petition.⁷ Later, the Claimant filed a pleading entitled Extension of Petition for Emergency Measures ("Petition Extension"), on April 3, 2020.⁸
15. Following an exchange of communications between the Parties and the Emergency Arbitrator, the latter proceeded with the emergency proceedings ("Emergency Proceedings")⁹ and issued an award ("Emergency Arbitrator's Award") on April 15, 2020.
16. In the Emergency Arbitrator's Award, the latter made the following decisions based on the reasons stated therein:¹⁰

“

- (i) *The Claimant complied with the provisions of Article 9.5 of the LCIA Rules at the time it filed its Petition for Emergency Measures;*
- (ii) *The Respondent shall refrain from making further demands for payment under the HSBC Letter of Credit, as well as any act tending to its enforcement, until such time as the arbitral tribunal created in this arbitration, decides to confirm or amend this decision;*
- (iii) *The demand sent by the Respondent to the Claimant by means of official correspondence number 7B/2020/RJMN of April 2, 2020, to restore the HSBC Letter of Credit to the amount in force at the time prior to the collection by the Respondent of the amount of USD 13,627,892.00, is suspended until the arbitral tribunal created in this arbitration, orders (sic) otherwise;*
- (iv) *Deny the emergency measure ordering the Respondent to refrain from making additional demands for payment in connection with the Banorte Letter of Credit;*

⁵ LCIA email dated April 2, 2020.

⁶ Email from the Emergency Arbitrator dated April 3, 2020.

⁷ Email from the Emergency Arbitrator dated April 3, 2020 and Emergency Arbitrator's Award, ¶ 20.

⁸ Extension of Petition dated April 3, 2020 and Emergency Arbitrator's Award, ¶ 21.

⁹ Emergency Arbitrator's Award, ¶¶ 20-39.

¹⁰ Emergency Arbitrator's Award dated April 15, 2020, ¶¶ 135 and 136 (i) to (vi).

- (v) *deny the emergency measures mentioned in sub-paragraphs 61(i) and 61(iv), supra.*¹¹
- (vi) *dismiss all other petitions of the Parties."*

Answer to the Request for Arbitration

17. On April 24, 2020, i.e. subsequent to the issuance of the Emergency Arbitrator's Award, CFE filed its Answer to the Request for Arbitration ("Answer to the Request for Arbitration"), in which it set forth the following petitions:¹²

- a) *Revoke and annul the interim measures granted in favor of the Claimant indicated in paragraphs b) and c) of the Award issued in the Emergency Proceedings.*
- b) *Confirm the decisions indicated in resolutions d), e) and f) of the Award rendered in the Emergency Proceedings.*
- c) *Dismiss the Claimant's claims and issue the corresponding Award at the appropriate time in the proceedings, confirming that the Claimant breached its obligations under Financed Lump Sum Public Works Contract No. PIF-017/2015.*
- d) *In the event that the Arbitral Tribunal reserves its decision on the Emergency Interim Measures until the Final Award is rendered, proceed under the terms of petitions) and b).*
- e) *Consequently, order the Claimant to pay damages calculated from the date of the breach until the date of the final Award.*
- f) *Order the Claimant to pay all costs and expenses derived from this arbitration."*

IX. DEVELOPMENT OF THE PROCEEDINGS

18. The references that appear below to documents or communications are in italics when they are intended to paraphrase any statement in an abbreviated or not necessarily verbatim

¹¹ The subparagraphs referred to by the Emergency Arbitrator in the Emergency Arbitrator's Award read as follows: "(i) Issue an order directed to the Respondent requiring it to return to HSBC Mexico the amount obtained by the Respondent through the illegal enforcement of the HSBC Letter of Credit or, failing that, for that amount to be deposited in a fund or account under the custody of a third party (a trust or escrow account)" and "(d) Issue an order authorizing the Claimant to proceed with the cancellation of the HSBC Letter of Credit."

¹² Email and letter dated April 24, 2020 and Answer to the Request, pages 13 and 14.

manner, without altering the essence thereof; and are transcribed in quotation marks when they constitute a verbatim quote from a statement or document.

Initiation of the proceedings

19. On July 28, 2020, the date on which it was notified of the appointment of the three members of the Arbitral Tribunal, the Claimant informed the LCIA and the Arbitral Tribunal¹³ that the Parties agreed not to be bound by the time limits set forth in Article 15 of the Rules and, based on Article 15.1 of the Rules, agreed that they would determine the Procedural Calendar to be followed, jointly with the Arbitral Tribunal.
20. In the aforementioned communication, the Claimant requested that the request to the Parties made in the communication from the Office of the Clerk communication of the same date be rescinded, so that, within 28 days, Empalme would send to the Arbitral Tribunal and to the Parties, with a copy to the Office of the LCIA Clerk: (a) a written indication that its request for arbitration be considered as its statement of claim; or (b) its Statement of Claim. This communication from the Claimant was confirmed by CFE in an email dated July 29, 2020.
21. Pursuant to the foregoing, on August 6, 2020, the Arbitral Tribunal invited the Parties to submit a joint proposal for a Procedural Calendar by August 18, 2020, without waiving the option to submit individual proposals regarding those issues on which they had not reached an agreement. In the same communication, the Arbitral Tribunal indicated to the Claimant that, prior to August 25, 2020, it should submit either (a) a written indication that its Request for Arbitration be considered to be its statement of claim; or (b) its Statement of Claim, unless in the latter case the Parties had agreed to a different deadline.¹⁴
22. On August 7, 2020, the Claimant confirmed its previous statement in the aforementioned communication dated July 28, 2020 and stated that its Request for Arbitration should not be considered to be its Statement of Claim, which would be filed within the deadlines set forth in the Procedural Calendar.¹⁵
23. In the same communication of August 7, 2020 mentioned in the previous paragraph, the Claimant raised the possibility that the Parties and the Arbitral Tribunal would jointly prepare a document with the basic guidelines to be observed in the proceedings. The Arbitral Tribunal, for its part, invited the Respondent to comment on the Claimant's proposal and, in

¹³ Email from the Claimant dated July 28, 2020, addressed to the Office of the LCIA Clerk and the members of the Arbitral Tribunal.

¹⁴ Email from the Arbitral Tribunal to the Parties, dated August 6, 2020.

¹⁵ Email from the Claimant dated August 7, 2020.

the interest of expediting the commencement of the arbitration, requested the Parties, in the event that the Respondent agreed with the Claimant's proposal, in addition to what was requested therein, submit a joint proposal on the guidelines which, in its opinion, should be observed in the proceedings, within the deadline set by the Arbitral Tribunal in its communication dated August 6, 2020.

24. On August 18, 2020, the Claimant reported that the Parties were still working on the configuration and definition of the Procedural Calendar and requested that the Arbitral Tribunal grant an extension of 7 days to submit the respective proposal. In addition to the foregoing, the Claimant set forth some of the guidelines that, in its opinion, Procedural Order No. 1 should contain with regard to the proceedings.¹⁶ The Respondent stated on the same date that it had no comments on the Claimant's extension request and confirmed that the Parties were working to define the Procedural Calendar.¹⁷
25. The Tribunal granted the requested extension on August 19, 2020, setting August 25, 2020 as the deadline for the submission of the joint proposal for the Procedural Calendar, as well as for the submission of individual proposals with regard to the issues on which there is disagreement.¹⁸
26. On August 25, 2020, the Claimant submitted the basis for the procedural calendar agreed upon by the Parties, stating its understanding that the same would be incorporated into a procedural calendar drafted by the Arbitral Tribunal, subject to final comments by the Parties.¹⁹ The Respondent confirmed on the same day the contents of the message of the same date sent by the Claimant, regarding the basis for the Procedural Calendar.²⁰
27. The Arbitral Tribunal deliberated on the prior submissions of the Parties and prepared a first draft of Procedural Order No. 1, with the Procedural Calendar and procedural provisions, which it submitted to the Parties for their consideration by means of an email dated August 31, 2020, setting September 7, 2020 as the deadline for their comments in that regard. In the same email, the Arbitral Tribunal requested that the Parties to inform it whether a possible counterclaim had been considered and, if so, its implications with regard to the agreed Procedural Calendar; and also to inform it, to the extent possible, of an estimated date for holding the Hearing and the estimated duration thereof.²¹

¹⁶ By means of an email and letter from the Claimant, dated August 18, 2020.

¹⁷ Email from the Respondent dated August 18, 2020.

¹⁸ Email from the Arbitral Tribunal dated August 19, 2020.

¹⁹ Email from the Claimant dated August 25, 2020.

²⁰ Email from the Respondent dated August 25, 2020.

²¹ Email from the Arbitral Tribunal dated August 31, 2020 and draft of Procedural Order No. 1 attached thereto.

28. On September 7, 2020, the Claimant submitted the aforementioned draft Procedural Order No. 1, with the joint proposal of the Parties through the *change control* function with regard to that document, stating that the Parties were still discussing the estimated date and duration of the Hearing.²² On September 7, 2020, the Respondent confirmed the Claimant's statement regarding the draft Procedural Order No. 1, and confirmed that CFE had no intention of filing a counterclaim, and would therefore abide by the agreed deadlines included in the joint proposed Procedural Calendar.²³
29. On September 9, 2020, the Arbitral Tribunal sent the Parties the final text of Procedural Order No. 1, which included the changes to which the Parties jointly agreed, including the effective date of the Order and the Procedural Calendar, as well as the dates agreed upon by the Parties. In the same email, the Arbitral Tribunal included various instructions regarding the logistics to be followed with regard to the signature of that document, to be subsequently forwarded to the Parties and to the LCIA.²⁴

Procedural Order No. 1

30. Procedural Order No. 1 was signed by the representatives of each of the Parties and by each of the three members of the Arbitral Tribunal on the dates indicated therein, and its effective date was August 31, 2020. The Arbitral Tribunal sent this Order to the Parties and the LCIA on September 10, 2020.²⁵ The proceedings referred to below are derived from the Procedural Calendar set forth in Procedural Order No. 1.

Simultaneous pleadings submitted by the Parties in connection with the Interim Measures

Claimant

31. Pursuant to the Procedural Calendar, on September 21, 2020, the Claimant filed its Memorial on Interim Measures ("Empalme's Pleading on Interim Measures"), in which it extensively discussed the Emergency Arbitrator's Award with the request that "certain Interim Measures be confirmed and granted, respectively, in order to protect its legal sphere and guarantee the effectiveness of any future award in its favor." In the same pleading, Empalme requests an additional interim measure consisting of a petition that the Arbitral Tribunal "order CFE to pay the amount of USD \$6,950,822.24 derived from the Agreement of July 7, 2020, plus the interest accrued in accordance with the Contract or so that, in a subsidiary manner, it orders

²² Email from the Claimant dated September 7, 2020 and draft Procedural Order No. 1 attached thereto.

²³ Email from the Respondent dated September 7, 2020.

²⁴ Email from the Arbitral Tribunal dated September 9, 2020 and final version of Procedural Order No. 1 attached thereto.

²⁵ Email from the Arbitral Tribunal dated September 10, 2020 and Procedural Order No. 1 attached thereto, signed by the representatives of the Parties and the members of the Arbitral Tribunal.

CFE to issue a guarantee for the amount that is the subject of that agreement."²⁶

32. Empalme formulated the following requests in the aforementioned Pleading:

“

- A. *Confirm the Interim Measures granted to EMPALME in the Emergency Award consisting of:*
 - (i) *The issuance of an order establishing that EMPALME should not restore the HSBC Letter of Credit to the amount in effect at the time prior to the illegal enforcement by CFE; and*
 - (ii) *The issuance of an order directed to CFE to refrain from making additional payment demands in connection with the HSBC Letter of Credit, as well as any act tending to its enforcement.*
- B. *That EMPALME be granted the Interim Measures indicated in this pleading, consisting of:*
 - (iii) *The issuance of an order addressed to CFE requiring it to return to HSBC Mexico the amount obtained by CFE through the illegal enforcement of the HSBC Letter of Credit or, alternatively, deposit such amount in a fund or account under the custody of a third party;*
 - (iv) *The issuance of an order ordering the cancellation of the HSBC Letter of Credit; and,*
 - (v) *The issuance of an order addressed to CFE ordering the payment of the amount subject to the July 7, 2020 Agreement or, alternately, the submission of a guarantee."*

Respondent

33. On September 21, 2020, the Respondent filed its Pleading regarding the Interim Measures ("CFE's Pleading on Interim Measures"), "the subject matter of which is the discussion of the permanence, revocation or amendment of the Interim Measures issued by the Emergency Arbitrator."²⁷

²⁶ Empalme's Pleading on Interim Measures dated September 21, 2020, and ¶¶ 3 and 202 to 220 therein.

²⁷ CFE's Pleading on Interim Measures dated September 21, 2020, and ¶ 38 thereof.

34. CFE formulated the following petitions in the aforementioned Pleading:

- "a) *Set aside the Interim Measures ordered in the Arbitration Award in the emergency proceedings dated April 15, 2020 in connection with this dispute.*
- b) *If the validity of the interim measures is confirmed that the Claimant be ordered to provide a guarantee in accordance with Article 25.1 of the LCIA Rules, until the main proceedings are resolved in an amount that includes damages that could be suffered by CFE for hindering the enforcement of the HSBC Letter of Credit".*

Simultaneous answer to the Pleadings of the Parties related to the Interim Measures

Claimant

35. Pursuant to the Procedural Calendar, on October 12, 2020, the Claimant filed a Empalme's Answer in Response to CFE's Pleading on Interim Measures ("Empalme's Answer on Interim Measures"), in which it contested Respondent's assertions contained in CFE's Pleading on Interim Measures, and made the same requests set forth in Empalme's Pleading on Interim Measures.²⁸

Respondent

36. On October 12, 2020, the Respondent filed its Answer to the Pleading on Interim Measures with regard to the Interim Measures ("CFE's Answer on Interim Measures"), whereby it extensively disputed the Claimant's assertions contained in Empalme's Pleading on Interim Measures and submitted the following petitions:²⁹

“

- a) *Set aside the Interim Measures issued in the arbitration award in the emergency proceedings dated April 15, 2020 in connection with this dispute.*
- b) *Allow the restoration of the HSBC Letter of Credit.*
- c) *Allow additional requests in the event of breach.*

²⁸ Empalme's Answer on Interim Measures dated October 12, 2020 and ¶ 29 thereof.

²⁹ CFE's Answer on Interim Measures dated October 12, 2020 and ¶ 211 thereof.

- d) *In the event that the validity of the interim measures is confirmed, the Claimant should be ordered to provide a guarantee in accordance with Article 25.1 of the LCIA Rules.*
- e) *Dismiss the petitions for additional Interim Measures."*

Decision of the Arbitral Tribunal on Interim Measures

37. The Arbitral Tribunal conducted a detailed analysis of the Emergency Arbitrator's Award as well as the pleadings and documents analyzed by the Emergency Arbitrator in issuing that Award. Likewise, the Arbitral Tribunal analyzed the pleadings of the Parties contained in their respective briefs, which are cited in paragraphs 27 to 32 above, as well as the exhibits submitted by the Parties in support of their pleadings, on which the Tribunal deliberated in order to be in a position to make the appropriate decision in accordance with paragraph 9.11 of Article 9B of the Rules.

Procedural Order No. 2

38. In the interest of maintaining the *status quo* by virtue of the decision of the Emergency Arbitrator and in order not to aggravate the existing dispute between the Parties; and primarily taking into account that the issues raised by the Parties with regard to the Interim Measures essentially correspond to the merits of the case and form part of the dispute raised by the Parties in the Request for Arbitration and the Answer to the Request, the Arbitral Tribunal conducted the deliberations it deemed necessary and issued Procedural Order No. 2 dated October 26, 2020³⁰ -within the deadline set for that purpose in the Procedural Calendar- which it transmitted to the Parties by email on the same date and by which it resolved the issues raised under the terms transcribed verbatim below, due to their relevance for the purposes of the dispute.

“

1. *The Arbitral Tribunal confirms the decision of the Emergency Arbitrator referred to in paragraph 136 (i) of the Emergency Arbitrator's Award, for the reasons expressed by the latter and, therefore, confirms that the Claimant complied with the provisions of Article 9.5 of the LCIA Rules at the time it filed its Petition for Emergency Measures.*
2. *Since the Request for Arbitration has been filed and as agreed by the Parties, it is a matter relative to the merits of the case and forms part of the subject matter of this arbitration, the Arbitral Tribunal confirms the decision of the Emergency Arbitrator referred to in paragraph 136 (ii) of the Emergency Arbitrator's Award and, therefore, the Respondent shall refrain from making any further demands for payment under the*

³⁰ Procedural Order No. 2 dated October 26, 2020 and Rulings chapter contained therein.

HSBC Letter of Credit, as well as any act tending to its enforcement, while these arbitration proceedings are pending and the Tribunal issues its final award.

3. *Since this is a matter related to the merits of the case and that forms part of the litis of the present arbitration, the Arbitral Tribunal confirms the decision of the Emergency Arbitrator referred to in paragraph 136 (iii) of the Emergency Arbitrator's Award and, therefore, while the present arbitration proceedings are pending, the request made by the Respondent to the Claimant, by means of official correspondence number 7B/2020/RJMN of April 2, 2020, to restore the HSBC Letter of Credit to the amount in effect at the time prior to the collection by the Respondent of the amount of USD 13,627,892.00, is suspended until such time as the Arbitral Tribunal rules on the merits of that request.*
4. *Since this is a matter related to the merits of the case and that forms part of the dispute in this arbitration, the Arbitral Tribunal sets aside the decision of the Emergency Arbitrator referred to in paragraph 136 (iv) of the Emergency Arbitrator's Award and, therefore, the Respondent shall refrain from making any demand for payment under the Banorte Letter of Credit, as well as any act tending to its enforcement, while this arbitration proceeding is pending and until such time as the Tribunal renders its final award.*
5. *Since this is a matter related to the merits of the case and that forms part of the subject matter of this arbitration, the Arbitral Tribunal confirms the decision of the Emergency Arbitrator referred to in paragraph 136 (v) of the Emergency Arbitrator's Award and, therefore, the Claimant's Request that an order be issued to the Respondent requiring it to return to HSBC Mexico the amount obtained by the Respondent through the enforcement of the HSBC Letter of Credit or, alternately, that such amount be deposited in a fund or account under the custody of a third party (a trust or escrow) is denied.*
6. *Since this is a matter related to the merits of the case and that forms part of the subject matter of this arbitration, the Arbitral Tribunal confirms the decision of the Emergency Arbitrator referred to in paragraph 136 (v) of the Emergency Arbitrator's Award and, therefore, the Claimant's Request for an order authorizing the Claimant to proceed with the cancellation of the HSBC Letter of Credit is denied.*
7. *Likewise, since the claim for payment or deposit referred to by the Claimant is a matter related to the merits of the case, which should therefore form part of the dispute in this arbitration, the Arbitral Tribunal denies request to grant the Additional Interim Measures requested by the Claimant in paragraphs 202 to 220 of Empalme's Pleading on Interim Measures; and as regards the deposit alternatively requested by the Claimant, this request also fails to meet the requirements of necessity, urgency, irreparability or proportionality.*
8. *All other requests made by the Parties in their respective Memorials and Pleadings submitted to the Arbitral Tribunal at this stage of the proceedings are dismissed."*

39. The Parties did not object in any way to the rulings of the Arbitral Tribunal under the terms of Procedural Order No. 2.

Statement of Claim

40. The contents and terms of the Statement of Claim are discussed below in the analysis of the merits of the case. The circumstances that existed with regard to this procedural action gave rise to numerous motions, which are summarized below due to their importance.
41. According to the Procedural Calendar,³¹ the Claimant was required to file its Statement of Claim within 100 days after the Decision of the Arbitral Tribunal on Interim Measures;³² which implies that the respective deadline would expire on February 10, 2021.
42. The Claimant filed its Statement of Claim in electronic format through an email dated February 11, 2021, at 0:06 A.M., stating in its email that *the Exhibits to that Memorial were being uploaded to the link it provided therein, which continued to be updated*. In the same email, the Claimant stated that it was preparing a detailed list of the Exhibits, which it would share at a later date.
43. Next, by means of an email dated February 11, 2021, transmitted at 6:57 A.M., the Claimant reported that it was still waiting for the completion of the import of the Exhibits of the Statement of Claim to the Dropbox that it had prepared; which, according to the system, *should not take more than a couple of hours*.
44. Subsequently, by means of an email of the same date, transmitted at 1:32 p.m., Empalme reported that all the documents in the Exhibits folder of the Statement of Claim were available for viewing. Likewise, the Claimant stated in the same communication that *from that moment forward, it agreed that, if deemed necessary, one day could be added to the deadline for CFE to produce its Statement of Defense*, due to the aforementioned circumstances. In the same communication, the Claimant also commented that its Statement of Claim would be received shortly *with the updated list of exhibits, without modifying any other substantial aspect of that memorial*.
45. By means of a communication on the same date, February 11, 2021, transmitted at 14:15 hours, the Arbitral Tribunal asked the Claimant if there were any additional files to download,

³¹ Procedural Order No. 1 dated August 31, 2020, page 5.

³² Issued on October 26, 2020, by means of the aforementioned Procedural Order No. 2.

subsequent to the communication sent to Empalme by the Tribunal at 13:24 hours to acknowledge receipt, in Dropbox, of Exhibits to the Statement of Claim; furthermore, it requested that the Claimant to specify the time at which it concluded the submission of all of the documents in the Exhibits folder of the Statement of Claim to Empalme's Dropbox platform, requesting that it refrain from modifying the text of that memorial, with the exception of the list of the Exhibits thereto. In the same communication, the Arbitral Tribunal invited the Respondent to submit its comments no later than February 12, 2021.

46. The Claimant, in response to the Arbitral Tribunal's request, informed it by means of an email dated February 11, 2021 transmitted at 2:30 p.m., that the import of the files from its electronic folder had been completed around 1:30 p.m., requesting that they be downloaded again if it had not previously done so. Finally, on the same day, at 7:44 p.m., the Claimant sent an email communication to which it attached the Statement of Claim, stating that it *already reflected the updated exhibits*; and at 7:53 p.m., it sent the Statement of Claim in Word, stating that *in the next few days it would send a copy of that memorial and the accompanying expert report*.
47. By virtue of the events mentioned in the preceding paragraphs and taking into consideration that the communications received from the Parties throughout February 11, 2021 implied a brief delay of minutes for the submission of the Statement of Claim and of a few hours for the voluminous Exhibits, without the Respondent having raised any objection within the deadline set for that purpose, nor later, in an email communication dated February 17, 2021, the Arbitral Tribunal declared that the Statement of Claim had been timely filed and added one day to the deadline for Respondent to produce its Statement of Defense, which was originally set to expire on May 21, 2021, and this was reflected in Procedural Order No. 1. In that regard, the Arbitral Tribunal pointed out to the Parties that the provisions of Article 4.6 of the Rules should be taken into account in determining the new expiration date of that deadline.
48. By means of an email dated February 18, 2021, and a letter of the same date attached thereto, the Respondent expressed the need to "issue its position on the determinations adopted by the Arbitral Tribunal under the terms of its communication of February 17, 2021 at 8:38 p.m." In that communication, the Respondent analyzes in detail the events that took place on February 11, 2021 in connection with the filing of the Statement of Claim and the documents constituting Exhibits thereto,³³ which are the same ones referred to by the Arbitral Tribunal in the preceding paragraphs.

³³ CFE's pleading dated February 18, 2021, Facts chapter, pages 1 to 3.

49. In the aforementioned pleading, the Respondent extensively contests the decisions adopted by the Arbitral Tribunal in its communication dated February 17, 2017, arguing that Empalme had failed to comply with the Procedural Calendar by virtue of the untimely filing of the Statement of Claim and Exhibits cited above; the short period of time granted to CFE to compare the first and second versions of the Statement of Claim, in order to determine whether the second one contains substantive changes with respect to the first one; the impossibility to access the Exhibits to the Statement of Claim contained in Empalme's Dropbox platform; the failure to copy some of CFE's representatives on the various emails; and, the alleged mandatory applicability of the Commercial Code to the arbitration proceedings.³⁴
50. Consequently, , the Respondent submitted the following requests to the Tribunal:³⁵

"Primary petitions:

- I. *Reconsider the decisions and rule that the Statement of Claim was not timely filed under the terms of the lex arbitri, and that the actions in these proceedings be terminated.*
- II. *Declare as inadmissible the documentary, testimonial and expert evidence submitted extemporaneously and without just cause by the Claimant, to which CFE still does not have access.*

In the alternative, if the Arbitral Tribunal confirms its decision to accept the untimely filing of the Statement of Claim:

- III. *That it be exclusively with respect to the so-called "MEMORIAL 1"³⁶ given the scope of the decision of the Arbitral Tribunal of February 17, 2021, and only with respect to the evidence that can be determined to have been presented in the same act of February 11, 2021 at 0:06 am.*
- IV. *Hold that MEMORIAL 2 was not presented.³⁷*
- V. *That the Claimant be urged to respect the procedural terms set forth in the Procedural Calendar and the various agreements entered into by the Parties in Procedural Order No. 1.*
- VI. *That the Claimant be urged to send copies of all future communications to all legal representatives of the Commission.*

³⁴ CFE's pleading dated February 18, 2021, Considerations chapter, pages 3 to 8.

³⁵ CFE's pleading dated February 18, 2021, Petitions, pages 8 and 9.

³⁶ Statement of Claim filed by Empalme on February 11, 2021, at 00:06 A.M.

³⁷ Statement of Claim filed by Empalme on February 11, 2021, at 19:44 hours.

VII. *CFE's right to make a statement regarding the content of the Exhibits is reserved until access to them is granted, since to date it has not been able to verify their content, origin or authenticity.*

VIII. *Derived from the previous point, CFE requests that the term of 100 days to answer the Statement of Claim under the of numeral IX of the Procedural Calendar, should not begin to be calculated until CFE has access to the Exhibits of the Statement of Claim in light of the facts set forth herein.*

IX. *That the proceedings in this arbitration be suspended pending the resolution of what is stated herein and other necessary measures be taken to restore the procedural balance between the Parties arising from the aforementioned facts and to ensure due process in the ongoing arbitration."*

51. By means of an email dated February 18, 2021, the Claimant requested that it be granted until February 23, 2021 to submit its representations regarding CFE's communication in connection with the Decision of the Arbitral Tribunal of February 17, 2021. The Arbitral Tribunal granted the Claimant's request by means of an email of the same date. In addition, by means of an email dated February 23, 2021, the Arbitral Tribunal requested that the Claimant provide it with information with regard to Dropbox messages with information on shared folder activity, in order to understand whether they contained new evidence or changes to the ones Empalme had already submitted. The Claimant responded to the above request by means of the letter from Empalme referred to in the following paragraph.³⁸
52. By means of an email dated February 23, 2021 and attached thereto, the Claimant submitted comments in response to the Respondent's communication dated February 17, 2021. In its communication, the Claimant presents its arguments for the purpose of refuting the claims of CFE and made the following statement for the reasons set forth in its communication:
- (i) It agrees that the deadline to file CFE's Statement of Defense will begin to be calculated after CFE has had access to the documents attached to the Statement of Claim;
 - (ii) The text of the Statement of Claim was not amended beyond the reference to the Exhibits;
 - (iii) Any issue related to the filing of the Statement of Claim was definitively resolved by the Arbitral Tribunal in its communication dated February 17, 2021; and,

³⁸ Empalme's pleading dated February 23, 2021, page 5.

- (iv) Since February 11, 2021, three representatives of CFE have had full access to the shared folder containing the Empalme Exhibits and since February 18, 2021, all representatives of CFE had access to the that folder, independently of providing a link in its communication where the Statement of Claim, its Exhibits, the Witness Statements and the Expert Report, with their respective exhibits, may be found.³⁹
53. By means of an email dated February 24, 2021, the Arbitral Tribunal requested that the Respondent make the statements it is entitled to make, exclusively with regard to the Claimant's representations regarding the communications received by the Arbitral Tribunal with respect to the activity noted in the "Exhibits to Empalme's Statement of Claim" folder in the Claimant's Dropbox folder, by virtue of the fact that the latter made reference in its correspondence cited in the previous paragraph⁴⁰ to the information requested by the Arbitral Tribunal on February 23, 2021. In the same communication, the Arbitral Tribunal also requested that the Respondent confirm that all of its representatives have access to the Claimant's Dropbox folder.
54. The Respondent replied to the Arbitral Tribunal by means of an email dated February 25, 2021 and correspondence of the same date attached thereto, in which it stated:
- (i) Since it did not have access to the Claimant's Dropbox folder on the date mentioned by Empalme, CFE was not in a position to verify the nature of the changes made by the opposing party, since the latter has failed to copy certain representatives of CFE on its communications, while others, having received a copy of the communication, did not have access to the folder;
 - (ii) "... we had access to the digital files submitted by the opposing party as of February 23, 2021 at 11:04 p.m., which, given the time of their submission, were not reviewed until the following day";
 - (iii) The Claimant's conduct *constitutes* "... a clear violation of Procedural Order No. 1 and good practice in arbitration by modifying evidentiary content without the authorization or oversight of the Arbitral Tribunal, a fact that should not be looked at as an isolated event ... [and] ... as a situation analogous to the late submission of certain material, Empalme should have requested authorization from the Arbitral Tribunal and, if applicable, CFE should have been given an opportunity to be heard before any such change was unilaterally made";
 - (iv) "[w]ithout prejudice to the changes found by the Arbitral Tribunal itself, it should not go unnoticed that from the information in the Dropbox Folder itself it appears ..." that "... between February 11 and 19, 2021, information continued to be uploaded furtively despite the Claimant's assertion that the completion of the upload of documentation occurred on

³⁹ Empalme's pleading dated February 23, 2021.

⁴⁰ Empalme's pleading dated February 23, 2021, pages 4 and 5.

February 11, 2021 at 1:30 a.m. ..." in said folder certain attachments are missing and, A-050 is in EML format which is "... not readable without compromising access to sensitive programs and data related to CFE's electronic messaging system."

- (v) The Claimant's most recent conduct "... is in no way circumscribed to the duties and practice of good faith in arbitration and *the Arbitral Tribunal should analyze such conduct in light of Procedural Order No. 1 and the IBA Guidelines on Party Representation in International Arbitration*; and,
- (vi) The Arbitral Tribunal is requested to *review the irregularities brought to light by CFE and the new conduct of the Claimant in view of what was brought to light in CFE's communications, so as not to leave them without consequence in order to restore procedural equality and fairness and, if applicable, rule in accordance with what was requested by the Respondent in its pleading dated February 18, 2020 (sic).*⁴¹

Procedural Order No. 3

55. Having considered the positions of the Parties, and having conducted such deliberations as it deemed necessary, in order to accord the Parties equal treatment in the proceedings in accordance with Article 14.4 (i) of the Rules; and taking into account the context of the circumstances in which the facts disputed by the Parties occurred and their implications for the proceedings, as well as the representations of the Claimant and the Respondent, the Arbitral Tribunal issued Procedural Order No. 3 dated March 8, 2021, which was transmitted to the Parties by means of an email of the same date, pursuant to which, in essence:

- a. for the reasons set forth in the Background chapter of the Order in question, the decision of the Arbitral Tribunal in its communication dated February 17, 2021 was confirmed⁴² in the sense that the Statement of Claim and the files that form part of the folder in question, as well as the second copy of the Statement of Claim, including its list of Exhibits, were timely filed by the Claimant;
- b. By virtue of the foregoing, for all purposes inherent to the hearing of the case, the documents that will make up the respective file are the second copy of the Statement of Claim, including its list of Exhibits, as well as the folder entitled "Exhibits to Empalme's Statement of Claim", with all the files that comprise it, including witness statements and expert reports, with their exhibits and appendices;
- c. The Tribunal recognized that the Respondent should not be affected in the deadline to respond to the Statement of Claim, thus the deadline set in Procedural Order No. 1 was

⁴¹ Should have read February 18, 2021.

⁴² Communication from the Arbitral Tribunal dated February 17, 2021, cited in paragraph 47 above.

modified to begin to be calculated as of the day following February 23, 2021, the date on which the Respondent acknowledged that the Claimant provided a link to the Dropbox Folder accessible through password, allowing free consultation and downloading of the aforementioned Exhibits without the need to use an authorized account; and,

- d. Considering the pending procedural actions, as well as the deadlines established for that purpose, agreed upon and reflected in Procedural Order No. 1, the Procedural Calendar contained in that Order was modified in accordance with Articles 14.4 (ii) and 14.5 of the Rules, to be in accordance with the terms of the modified Procedural Calendar contained in Procedural Order No. 3.
56. By means of a communication dated May 13, 2021, for the reasons expressed therein, the Respondent requested an extension of 20 days for the filing of its Statement of Defense, expressing its consent for the Claimant to be granted *at least the same additional time in the development of the arbitration in its different procedural stages, in order to ensure procedural fairness and to give the Parties due opportunity to present their case*. The Arbitral Tribunal communicated this to the Claimant on May 15, 2021, and the Claimant responded by means of a communication dated May 19, 2021, making various representations in addition to expressing its consent to the granting of the extension requested by Respondent.
 57. By means of a communication dated May 24, 2021, the Arbitral Tribunal the requested extension subject to the issuance of Procedural Order No. 4 with the new Procedural Calendar; and for that purpose, the Arbitral Tribunal raised several procedural issues with the Parties, requesting that they submit a joint proposal or, in the alternative, that they submit their individual proposals regarding the Procedural Calendar.
 58. The Respondent responded by means of a communication dated May 26, 2021, making various statements with regard to the proposed date for holding the Hearing, its preference for the Hearing to be held by videoconference, and the length of the Pre-Hearing Briefs, with respect to which it stated that they *should have a maximum length of 15 pages*⁴³ and, in addition, *the Parties defined that they would be limited* to the presentation of arguments and evidence in response to those presented in the previous communications.⁴⁴
 59. The Claimant responded to the Arbitral Tribunal's request by means of a communication dated May 28, 2021. In that communication, in addition to referring to issues relating to the

⁴³ Procedural Order No. 1, chapter X (PLEADINGS), paragraph 11.

⁴⁴ That is, the Pleadings submitted by the Parties in connection with the Interim Measures, the Responses thereto, the Statement of Claim and the Statement of Defense, pursuant to Procedural Order No. 1, Chapter X (PLEADINGS), ¶9.

Procedural Calendar, the Claimant referred to the Respondent's statements regarding the length of the Pre-Hearing Briefs and suggested that *a limit of 70 pages* be set, arguing that *by agreeing to a limitation of 15 pages, the Claimant was not aware that, during the course of the proceedings, CFE would continue to carry out actions related to the Power Plant that could modify the factual situations initially raised by EMPALME*, citing examples in that regard.

60. The Respondent replied to the opposing party on May 28, 2021 to refute the Claimant's aforementioned statements, requesting that it be granted a *reasonable period of time to allow it to comment on the issues referred to by the Claimant* in such communication, *or to dismiss them since Claimant had already had the procedural opportunity to do so*. The Claimant, under the terms of a communication dated May 29, 2021, briefly mentioned the reasons for making the representations in question and expressed *no objection to CFE being given the opportunity to express its views on the matter*. The Arbitral Tribunal granted the Respondent the requested deadline to do so by means of a communication dated May 31, 2021.
61. The Respondent used this opportunity to elaborate on the reasons for its opposition to the increase in the length of the Pre-Hearing Briefs sought by the Claimant, stating in summary that:
 - a. The modifications to the status of the dispute, which the Claimant alleges, are nonexistent by virtue of the fact that:
 - (i) In accordance with Clause 18.4 of the Contract, in the event of unjustified delay by the Contractor (Empalme) in correcting *Minor Defects*, CFE may make the corrections either directly or by contracting a third party at the Contractor's expense *by enforcing the Performance Bond and/or the Operational Bond*;
 - (ii) By virtue of the foregoing, the Claimant *attempts attribute the character of supervening facts to known and predictable situations, as a consequence of the failure to make the corrections*, therefore any issue related to the resolution of the *Minor Defects* should have been raised in the Request for Arbitration or in the Statement of Claim and should *not be a valid reason to increase the length of the Pre-Hearing Briefs*; and,
 - (iii) the alleged changes to the status of *Minor Defects* were raised in a generic manner by the Claimant, *and it failed to provide sufficient details to identify the particular facts that could have modified the status of the dispute*.

- b. The increase in the length of the Additional Pre-Hearing Briefs represents *a risk to procedural fairness*, by virtue of the fact that:
 - (i) The Parties would not be on an equal procedural footing if the request to increase the lengths of the Briefs were to be granted, since they must be filed simultaneously and, therefore, the increase in their length represents *a serious risk* for the Respondent of *facing the uncertainty of the Claimant filing its Brief with new arguments without the opportunity for CFE to generate a true defense*; and,
 - (ii) The request for an increase in the lengths of the Briefs made by the Claimant *has as a potential objective the presentation of new arguments and claims*, since [as of the date of such request] CFE had not filed its Statement of Defense and, therefore, *the only reason that explains Empalme's request is the intention to expand the arguments and claims set forth in the Statement of Claim*.
- c. The *agreements made by the Parties in Procedural Order No. 1* [which include those relating to the length and content of the Pre-Hearing Briefs, in accordance with Respondent's previous representations] must be respected, pursuant to Article 14 of the Rules and Article 1435 of the Commercial Code.

Procedural Order No. 4

- 62. The Arbitral Tribunal took into consideration the statements of the Parties contained in the communications referred to above, and after deliberating to the extent it deemed necessary issued Procedural Order No. 4 dated June 7, 2021, which was transmitted to the Parties by means of an email of the same date, with regard to the issues raised. Pursuant to said Order, among other issues the Arbitral Tribunal ruled that:
 - a. The Hearing would be held in person, and in the event that health conditions change due to the COVID 19 pandemic, and if a change is warranted, it would be decided by the Arbitral Tribunal after consulting with the Parties at the Pre-Hearing Conference;
 - b. The Pre-Hearing Conference would be held by videoconference on November 30, 2021;
 - c. The Hearing would be held during the period between Tuesday, January 25, 2022 and February 28, 2022;
 - d. Considering the positions of both Parties and for the reasons expressed in the Order, the maximum length of the Pre-Hearing Briefs would be 30 pages, *not including*

the cover page, the table of contents, lists of references, lists of exhibits, lists of definitions and similar text, in accordance with subsection X, paragraph 11 of Procedural Order No. 1; and

- e. The Procedural Calendar was consequently modified to reflect the terms specified in the new Procedural Calendar contained in the same Procedural Order.

- 63. The Arbitral Tribunal's rulings under the terms of Procedural Order No. 4 were not objected to in any way by any of the Parties. The Claimant made a clarifying statement on the same June 7, 2021 with regard to paragraph 5(c) of the background section of the Order, without such statement constituting an objection on its part or having any relevance for the effects of such statements or for the proceedings, which continued in the manner set forth in this Award.

Statement of Defense

The content and terms of the Statement of Defense are discussed below in the analysis of the merits of the case.

- 64. The Respondent filed its Statement of Defense attaching it to its email dated June 23, 2021, with which it provided the electronic link necessary to access the information attached to the Statement of Defense, contained in the Microsoft - OneDrive platform.

Claimant's Request for Production of Documents by CFE

- 65. The Claimant timely submitted its Request for Production of Documents by means of an email dated July 23, 2021, to which it attached (i) the cover letter of Empalme's Request for Production of Documents; (ii) Empalme's Request for Production of Documents, consisting of a "*Redfern Schedule*" type table; and (iii) A Sole Attachment to the Request, entitled "*List of ten-minute signals requested from CFE for the period between February 1, 2019 and March 12, 2020*".

Respondent's Request for Production of Documents by Empalme, and Delivery of Unchallenged Documents

- 66. The Respondent timely requested the production of documents in the possession or under the control of its counterparty, by means of an email dated July 23, 2021, to which it attached CFE's Request for Production of Documents, containing an introductory section in support of the request, followed by the identification of the requested documents, in a "*Redfern Schedule*" type table.

Delivery by CFE of Documents Requested by Empalme and not Challenged by CFE; and Formulation of the Respondent's Objections to the Production of Documents Requested by Empalme

67. By means of an email dated August 12, 2021, the last day of the deadline set for this milestone in the proceedings, the Respondent informed the Arbitral Tribunal that, due to the volume of unchallenged documentation, which would be submitted voluntarily, the Parties agreed that the information corresponding to the unchallenged requests would be produced on August 13, 2021, without affecting subsequent phases of the Procedural Calendar. The Claimant responded to the above by means of an email dated August 12, 2022, confirming the agreement of the Parties.
68. By means of a second email dated August 12, 2021, to which the Respondent attached the "Redfern Schedule" type table submitted by the Claimant, in the column of such table existing for such purpose, the Respondent timely formulated CFE's objections to the production of documents requested by Empalme.
69. On August 13, 2021, using a "hard disk" device included with a communication of the same date, the Respondent timely delivered the documents requested by Empalme to which CFE did not object.

Delivery by Empalme of Documents Requested by CFE and not Challenged by Empalme; and Formulation of Objections by the Claimant to the Production of Documents Requested by CFE.

70. By means of an email dated August 12, 2021, the Claimant attached a communication of the same date in which it stated that it produced the documents requested by the Respondent *under the terms outlined in that communication*, making various statements in connection therewith. Likewise, in the last paragraph of the aforementioned email, the Claimant stated that, *in accordance with the agreement of the Parties, Empalme would be sending CFE a link with all the documents produced*, on August 13, 2021.
71. In addition to the above paragraph, the Claimant attached to the same email cited therein, the "Redfern Schedule" type table submitted by the Respondent, in which the Claimant timely formulated Empalme's objections to the production of documents requested by CFE in the column of the table provided for that purpose.

Claimant's Reply to CFE's Objections to the Delivery to Empalme of Documents Requested by Empalme

72. By means of an email dated September 1, 2021, to which the Claimant attached the "*Redfern Schedule*" table submitted by the Claimant, in the column of such table provided for that purpose, Empalme timely filed Empalme's Reply to CFE's objections stated therein, to the production of documents requested by Empalme.

Respondent's Reply to Empalme's Objections to the Delivery to CFE of Documents Requested by CFE

73. By means of an email dated September 1, 2021, to which the Respondent attached the "*Redfern Schedule*" type table submitted by the Respondent, in the column of such table provided for that purpose, CFE timely filed CFE's Reply to Empalme's objections stated therein, to the production of documents requested by CFE.

Procedural Order No. 5

74. The Arbitral Tribunal deliberated on the positions expressed by both Parties under the terms of their aforementioned communications, with regard to their respective requests for the production of documents in the possession or under the control of the opposing Party, considering the objections formulated by the Party from whom the production was requested, as well as the reply of the opposing Party.
75. As a result of its deliberations, in order to give equal treatment to the Parties in accordance with Articles 14.4 and 22.1 of the Rules and further taking as a reference Article 3 of the IBA Rules on the Taking of Evidence in International Arbitration 2010 ("IBA Rules"), invoked by the Claimant and applicable to this arbitration pursuant to the agreement of the Parties in paragraph 16 of Chapter X (Pleadings) of Procedural Order No. 1, the Arbitral Tribunal resolved under the terms of Procedural Order No. 5 dated September 13, 2021, transmitted to the Parties by means of an email of the same day, regarding the production of the documents and categories of documents that were the subject of the dispute between the Parties.
76. By virtue of what has been stated in the two preceding paragraphs, the rulings issued by the Arbitral Tribunal may be summarized as follows:
- a. In general terms, the Documents produced by each of the Parties at the request of their counterparty may be sufficient to support their case and their claims; and by virtue of the nature, generality and volume of the additional Documents and information requested by the

Parties and the subject matter of their objections and replies, none of the Parties justified the need to order the requested document production;

- b. No later than September 28, 2021, the Parties were authorized to submit such supplementary information or Document that they consider relevant and of material importance, provided that it forms part of the Request for Production of Documents made by their counterparty, predates the Request for Production of Documents and is included in the Request for Production of Documents;
 - c. By virtue of its own representations, no later than September 28, 2021, the Respondent must produce documents numbered 7, 8, 10, 28 and 51, requested by the Claimant, otherwise, they could not be included in the Pre-Hearing Briefs specified in the Procedural Calendar;
 - d. The production of Documents Nos. 31, 32, 34 and 35, requested by the Claimant, was denied because, in addition to being information related to plants outside the scope of the Contract and the dispute at issue in this arbitration, the reasons given by the Claimant are based merely on its own assumption; and
 - e. With respect to the categories of Documents number 5 and 23, requested by the Claimant, it is clear from the reasons expressed by the Claimant for requesting their production that they are unrelated to issues relating to the substantiation of the Respondent's claims, but rather issues on which the Claimant has the burden of proof.
77. By means of an email dated September 24, 2021, to which it attached a communication of the same date, the Claimant *objected to the Decision of the Arbitral Tribunal in Procedural Order No. 5, requesting reconsideration and amendment thereof*, under the terms set forth in the aforementioned communication. In its communication, the Claimant stated that it *reserved the right to reinforce, broaden and/or amplify its objections with regard to the contents* of that Order, which it questioned in detail in said communication, and concluded by stating that it *reserved the right to make additional statements at the time of pending* [as of that date] *procedural milestones in the arbitration proceedings*.
78. As can be seen from the aforementioned communication, independent of the reservation of rights made by the Claimant in the same, the latter stated the following, as grounds for its objections and the admissibility of its request for reconsideration and amendment of the Decision of the Arbitral Tribunal:
- a. Procedural Order No. 5 violates the principle of procedural equality by not allowing Empalme access to the evidence in the possession of CFE, leaving it without full opportunity to assert its rights, since, even when Empalme initiated the arbitration as the Claimant, it did so because CFE enforced the HSBC Letter of Credit without providing documentation evidencing the amount it had enforced, and it had to do so without having access to the information and documents, since they were in the possession of CFE;

- b. Since CFE enforced the HSBC Letter of Credit, the Respondent must prove (i) the expenditures it incurred in resolving Minor Defects (MDs) and Warranty Claims (WCs); (ii) that such expenditures were strictly necessary and reasonable; the appropriateness of the resolution of the Minor Defects and Warranty Claims; and (iv) that Empalme was responsible for the resolution of the Minor Defects and Warranty Claims resolved by CFE;
 - c. Since the Power Plant has not been in Empalme's possession since March 26, 2019 (the date of Provisional Acceptance), there are documents essential to the case which Empalme does not have in its possession and are in the possession of CFE; and by not ordering their production, without applying negative inferences in the event that CFE fails to produce them, the principle of procedural equality would be violated and Empalme would be left without the opportunity to assert its rights, since CFE would have documentation to which Empalme does not have access;
 - d. The documents requested by Empalme – of which the Claimant provides details in its communication, and the importance of which it explains - are relevant to the case and substantive for its resolution, therefore their nondisclosure by the Respondents, which has them in its possession, cannot be used to prejudice the petitioner;
 - e. The Procedural Order in question fails to rule on several Requests for Production of Documents submitted by Empalme, which Empalme specifies in its communication, and this omission is not minor because it concerns material and relevant documentation, for the reasons stated therein, as in the case of the Root Cause Report mentioned by the Claimant and illustrated in Exhibit 1 of its communication; and
 - f. The production of the requested documents cannot be left to the discretion of the Party from which they are requested, and refers to the documentation produced by CFE, related to the exchange of communications with Doosan Skoda, which the Respondent argued it does not have available because the documentation is in control of the Subsidiary Production Company Generación III, which is information to which the Respondent has easy access, as it accredits by way of example with Exhibits 2 and 3 of its communication.
79. By means of an email dated September 25, 2021, the Arbitral Tribunal invited the Respondent to express its views on the statements made by the counterparty in the communication mentioned in the two preceding paragraphs, without prejudice to the fact that the terms of Procedural Order No. 5 would remain in force until the Arbitral Tribunal ruled on the Claimant's request.
80. The Respondent responded to the Arbitral Tribunal's invitation by means of an email dated September 29, 2021, to which it attached a communication of the same date in which it stated that the Claimant *has conducted itself in bad faith on multiple occasions, violating the procedural agreements of the Parties and the Procedural Orders issued by the Arbitral Tribunal*, citing various facts to support its assertions. The Respondent further stated that, as regards the particular points of the Objection and Request for Reconsideration filed by the Claimant, CFE reiterated that it had transmitted to the Claimant all the information and

documentation in the possession of the Respondent, in two stages; the first on August 13, 2021 and the second on September 28, 2021.

81. The Respondent further stated in the same communication, in connection with Request No. 4 of the Redfern Schedule, that it demonstrated its willingness to cooperate by undertaking to submit the "Root Cause Report", which was not yet in its possession, and would transmit it to the Claimant as soon as it received it; however, it added that, upon receiving it from Doosan Skoda, it warned that it contained a representation from the Supplier, in the sense that it was confidential and could not be used or produced as evidence in any judicial, arbitration or similar proceeding.
82. With regard to the above, the Respondent expressed its concern regarding the liabilities it could incur if such document were to be submitted in the arbitration without the consent of Doosan Skoda and requested that the Arbitral Tribunal *define and adopt the measures it deems appropriate and enable the Respondent to submit the "Root Cause Report" in question without causing an impairment of its assets or rights.*
83. In its petitions under the terms of the communication in question, the Respondent requested that the Tribunal: (i) dismiss the Claimant's requests and deny the request to amend the terms of Procedural Order No. 5; (ii) adopt the necessary measures for the production of the aforementioned "Root Cause Report"; (iii) take the Claimant's conduct into consideration for the purposes of determining and allocating the costs of the arbitration; and (iv) reserve CFE's right to make the relevant representations with regard to the issues addressed in its communication.
84. By means of an email communication dated September 30, 2021, the Claimant requested that it be granted *a period of time to comment briefly and only with regard to CFE's new representations regarding the production of the "Root Cause Report" that CFE claims to have recently received from Doosan Skoda.* The Arbitral Tribunal granted the Claimant's request by means of an email communication dated September 30, 2021, requesting that the Respondent refrain from making additional statements with regard to those made by its counterparty, since the Arbitral Tribunal would deliberate on the points of view of both Parties, in order to make the appropriate decision.
85. The Claimant submitted its representations in a timely manner by means of a communication dated October 4, 2021, attached to its email communication of the same date. Under the terms of the latter communication:
 - a. The Claimant includes a chronological review of the statements of CFE regarding the "Root Cause Report" requested by Empalme in section number 4 of its Request for Production of Documents, with some comments in that regard; and then

offers various arguments regarding the relevance of the "Root Cause Report";

- b. It disputes the *alleged confidentiality of the "Root Cause Report"* alleged by the Respondent, arguing that the *Supplier's representation* referred to by the Respondent does not strictly constitute a confidentiality agreement which is binding for the Respondent, and that pursuant to Clause 30.4 of the Contract "the arbitration proceedings shall be confidential and any Person participating therein shall maintain confidentiality ", therefore *all documentation to be produced and shared in the arbitration proceedings shall be subject to such protection*;
- c. Since Empalme purchased the Steam Turbine; since the alleged problem with the turbine arose prior to the Provisional Acceptance of the Plant; and since the Respondent intends to transfer to Empalme the amount of MXN\$206,000,000 for the work performed on the turbine, *it is illogical to limit Empalme's access to the documentation that allegedly provides details of the origin of the issue*; and
- d. Given the relevance of this issue *for the protection of Empalme's right to adequate defense*, Empalme expressed its willingness to hold a hearing on this issue, if deemed necessary by the Arbitral Tribunal; and,
- e. *Empalme reserved the right to initiate any legal action that may be appropriate to obtain such documentation, including, without limitation, those provided for in Articles 1444 and 1446 of the Commercial Code.*

Procedural Order No. 6

86. The Arbitral Tribunal deliberated on the positions expressed by the Parties under the terms of their aforementioned communications and ruled on the issues raised under the terms of Procedural Order No. 6 dated October 11, 2021, which set forth in detail the issues taken into consideration by the Tribunal in rendering its decisions in the "Considerations" chapter. The Procedural Order referred to in this section was sent to the Parties by means of an email dated October 11, 2021; among other matters:

- a. The Respondent was ordered to produce the report entitled "Final Technical Report - Root Cause Analysis and Turbine Passport" prepared by Doosan Skoda (Final Root Cause Report), as well as any other report that falls within the scope of the documentation requested by the Claimant in paragraph 4 of its Request for Production of Documents, which is in the possession or under the custody or control of the Respondent; the delivery of the specified report and any other documents included in this category being subject to the Claimant's signature of a statement ("Confidentiality Statement") agreeing to keep such report and documents

confidential and to refrain from using them for any purpose other than to support its position or defense in this arbitration;

- b. The Respondent was ordered to produce the documents described in paragraphs 7, 8, 10, 28, 51, 71, 73 and 74 of the Claimant's Request for Production of Documents, with respect to which it stated that it had no objection to their delivery and that they were in the possession of CFE Generación III, Subsidiary Production Company of the Respondent, specifying that the delivery of such documents was also subject to the Claimant having complied with the requirement to deliver the aforementioned Confidentiality Statement;
 - c. If the Respondent fails to comply with its obligation to deliver the information and documents referred to in this Procedural Order, as set forth in Procedural Order No. 5, they could not be included by the Respondent in the Pre-Hearing Brief provided for in the Procedural Calendar; in which case, the foregoing should be understood to be without prejudice to the provisions of Article 9.5 of the IBA Rules;
 - d. The other provisions of Procedural Order No. 5 would remain in full force and effect and would prevail, with the exception of the specific matters that are the subject of Procedural Order No. 6; likewise, the Procedural Calendar contained in Procedural Order No. 4 would remain in full force and effect.
87. The Arbitral Tribunal received no objection from either Party to the rulings contained in Procedural Order No. 6; and, in fact, as of October 14, 2021, the Parties began to proceed in accordance with such rulings. The Claimant sent an email communication dated October 14, 2021, to which it attached: (i) a letter of the same date, with representations regarding the production of documents pursuant to Procedural Order No. 6, with documents Exhibit 1, A-062 and Official Correspondence H62WO- 0269, as well as the delivery of its Confidentiality Statement; and (ii) a signed Confidentiality Statement. The Respondent made representations on the same day by means of an email, in connection with the production of the documents ordered by the *provision four* of Procedural Order No. 6, as well as in connection with the production of the Final Root Cause Report and the conditions for its delivery to the Claimant. The Claimant, for its part, expressed its consent to such conditions by means of an email communication dated October 15, 2021.
88. By virtue of the agreement of both Parties regarding the delivery of the Claimant's Confidentiality Statement and the Final Root Cause Report, by means of an email communication dated October 15, 2021, the Arbitral Tribunal indicated to the Parties the mechanics to be followed for the delivery of said documents.

First Confidentiality Statement

89. On October 18, 2021 the Claimant delivered to the Respondent the original version of the Confidentiality Statement with its original signature, and on the same day communicated it to the Respondent and to the Arbitral Tribunal, by means of an email of the same date to which it attached a copy of the Respondent's acknowledgment of receipt. The Respondent responded on the same day, by means of an email dated March 18, 2021, and by communication attached thereto, expressing its disagreement with the terms of the Confidentiality Statement, since it did not fully comply with the guidelines set forth in Procedural Order No. 6.

Procedural Order No. 7

90. Procedural Order No. 7, referred to in this section, even though it was issued on October 19, 2021 and was communicated to the Parties at 8:12 p.m. on that date by means of an email, was the result of deliberations of the Arbitral Tribunal in which the latter took into consideration the communications submitted by the Parties during the period between October 14, 2021 and October 18, 2021; that is, although the Respondent's communication dated October 19, 2021, discussed in the following point, was transmitted on that day at 7:20 p.m., at that time the Arbitral Tribunal was deliberating on the Parties' previous communications, submitted during the period in question, as well as on the terms in which Procedural Order No. 7 would be issued. Due to the aforementioned circumstances, the aforementioned communication of the Respondent went unnoticed at that time by the Arbitral Tribunal in issuing Procedural Order No. 7, in which the Arbitral Tribunal:
- a. Ordered the Claimant to adapt its Confidentiality Statement to the instructions indicated in operative paragraph 2 of Procedural Order No. 6 and to submit it no later than Friday, October 22, 2021; and, further ratified that, as ordered in Procedural Order No. 6, it should promptly physically deliver the original document containing the Confidentiality Statement to the Respondent with an original signature;
 - b. Ordered the Respondent to deliver to Claimant, no later than the business day following the Claimant's compliance with the foregoing, the English version of the Final Root Cause Report, and to deliver to the Claimant the Spanish version of such Report as soon as it is received, subject to the Claimant's compliance with the foregoing paragraph; and
 - c. It resolved that the other provisions of Procedural Order No. 5 and Procedural Order No. 6 would remain in effect in their terms and would prevail, with the exception of the specific issues that are the subject of Procedural Order No. 7, and that all provisions of the Procedural Calendar contained in Procedural Order No. 4 would remain in effect.

91. By means of the aforementioned email communication dated October 19, 2021, the Respondent had confirmed its objections to the terms of the Confidentiality Statement signed by the Claimant (already expressed in its communication of October 18, 2021), requesting that the Arbitral Tribunal *issue new instructions in light of what was expressed in CFE's letter* regarding that Statement. In addition to the foregoing, the Respondent reported in that same communication that it *had already received the Spanish version of the Final Root Cause Report*, which it would deliver to the Arbitral Tribunal together with the English version of the Report, to be delivered by the Tribunal to the Claimant once the requirements for such purposes had been met by Empalme.

Second Confidentiality Statement

92. By means of a subsequent email dated October 19, 2021, in response to the Respondent's communications dated October 18, 2021 and October 19, 2021, as well as to the provisions of Procedural Order No. 7:
- a. The Claimant stated that it disagreed *with the Respondent's argument and the support of its objection, considering that the Confidentiality Statement* [i.e. the one delivered on October 18, 2021] *complies with the spirit of Procedural Order No. 6, as well as with the essence of a confidentiality statement and seeks a fair balance with the rights of EMPALME*; and,
 - b. The Claimant further stated that, *in strict compliance with the order of the Arbitral Tribunal in Resolution 1 of Procedural Order No. 7, it was delivering a new version of the Confidentiality Statement* [dated October 19, 2021, attached to the aforementioned email] *in which the sentence referred to by the Arbitral Tribunal in Procedural Order No. 7 had been deleted*.
93. By means of a communication dated October 21, 2021, attached to an email communication of the same date, the Respondent again objected to the text of the second version of the Confidentiality Statement sent on October 19, 2021 by the Claimant. The latter responded the same day, by means of an email, in which it requested that it be granted a period of time to reply to CFE's representations on or before October 25, 2021. The Arbitral Tribunal granted the term requested by the Claimant by means of an email dated October 22, 2021.
94. The Claimant responded to the Respondent's objections by means of a letter dated October 22, 2021, which was attached to an email communication of the same date. In that communication, the Claimant requested that the Arbitral Tribunal *declare that the new objections raised by CFE with regard to the Confidentiality Statement dated October 19, 2021 are inadmissible and order the immediate production of the Doosan Skoda Report*.

95. In support of its request, the Claimant stated that, in *compliance with Procedural Order No. 7, in the new version of the Confidentiality Statement, filed on October 19, 2021, the Claimant deleted the entire disputed text and, therefore, eliminated the objections raised by CFE in its written submission dated October 21, 2021 were new and related to parts included in the original text of the Confidentiality Statement, which not only had not been contested by the Respondent in its written statement dated October 18, 2021 and were therefore consented to, but also those parts of the text were cited by CFE in that communication, without any statement or opposition whatsoever.*
96. In addition to the foregoing, the Claimant highlighted the fact that, having sent the first Confidentiality Statement to the Respondent on October 14, 2021, *it was not until October 18, 2021 that CFE, upon receipt of the signed physical document, decided to make representations; which, according to the Claimant's representations, showed that CFE's conduct had been in total violation of the principle of procedural efficiency and evidenced CFE's continuous dilatory tactics to avoid or at least delay the delivery of the Doosan Report and, consequently, prejudice the due defense of the Claimant.*
97. Taking into consideration what was stated by the Parties in their respective communications exchanged during the period between October 19, 2021 and October 22, 2021 in connection with Procedural Order No. 7 dated October 11, 2021, the Arbitral Tribunal analyzed the second Confidentiality Statement submitted by the Claimant, in light of their statements and the express provisions of Procedural Order No. 6 and Procedural Order No. 7. As can be seen from the contents of its email communication to the Parties dated October 26, 2021, the Arbitral Tribunal considered the Respondent's objections to be justified on the grounds that the Statement did not comply with the Arbitral Tribunal's instructions in the aforementioned Procedural Orders.
98. In the aforementioned communication of October 26, 2021, the Arbitral Tribunal urged both Parties to proceed in such a manner as to avoid any unnecessary delay or expense and to enable the efficient and expeditious conduct of the proceedings, in accordance with Articles 14.4 and 28.4 of the Rules; and also urged the Claimant to comply as soon as possible with the requirements of the aforementioned procedural orders.

Third Confidentiality Statement

99. The Claimant responded on the same date, October 26, 2021, by means of an email communication, stating therein that, *in order to avoid further delays and to enable the efficient and expeditious conduct of the proceedings, it requested a videoconference between*

the Arbitral Tribunal and the Parties, so that the terms under which the Confidentiality Statement should be drafted could be clarified.

100. The Arbitral Tribunal deliberated on the Claimant's statement and, by means of a second email of October 26, 2021, it informed the Parties that, in line with the purpose of achieving efficient and expeditious conduct of the proceedings, it considered the videoconference proposed by the Claimant unnecessary; and therefore, as requested by the latter in its previous email, it indicated the terms in which the third paragraph of the Confidentiality Statement could be drafted, in order to comply with the provisions of the aforementioned procedural orders. On the same date and by the same means, the Respondent acknowledged receipt and the Claimant stated that *the corresponding change would be made and the signed electronic version would be sent as soon as possible.*
101. The Respondent sent an additional communication by means of an email on October 27, 2021, stating, as a follow-up to the previous communication of from the Arbitral Tribunal, that, in order to *seek an expeditious solution to the issues related to the Confidentiality Statement, CFE considered that it is necessary to clarify* what in its opinion constituted *the point of dispute in the positions regarding the scope of the Claimant's confidentiality obligations*; and once such clarification had been made, the Respondent stated that *it adhered to the text suggested by the Arbitral Tribunal, adding a small modification*, consisting of the addition of one word, which is highlighted below, with which the third paragraph of the Confidentiality Statement would read as follows: *"Disclosure of the Confidential Information shall **only** be permitted to the extent that ..."*. The Tribunal took note of the Claimant's proposal by means of an email of the same date and, in order to put the matter under discussion to rest, invited the Claimant to make the addition requested by its counterparty, if considered it to be appropriate.
102. By means of an email dated October 27, 2021, the Claimant sent an updated version of the Confidentiality Statement, in *compliance with the specifications of the Arbitral Tribunal in its communications of October 26 and 27, 2021*, in which it incorporated the additional request of its counterparty; and further stated that, in order to *avoid further delays in the proceedings*, it requested that the Respondent *immediately deliver the Doosan Skoda Report*, by virtue of the Confidentiality Statement already sent to CFE by that means, *without prejudice to the delivery of the physical version with original signature via courier delivery.*
103. By means of an email dated November 1, 2021, the Respondent informed the Arbitral Tribunal that on that date it had received the version with the original signature of the Confidentiality Statement signed by the Claimant and, by virtue thereof, it attached to its

email the versions of the document entitled "Final Technical Report - Root Cause Analysis and Turbine Passport" prepared by Doosan Skoda Power, that is, the Final Root Cause Report.

104. On the same date, the Claimant requested by means of an email to its counterparty, that it *send the email through which Doosan Skoda delivered the aforementioned Report, in its native files in ".msg" format, since when documents in pdf, word, excel or similar programs are produced, it must be evidenced that they have not suffered any alteration since the date of their preparation or since they were shared.* Additionally, by means of an email dated November 4, 2021, the Claimant's representatives *noted that as of that date they had not received the requested email or any statement from CFE in that regard.*
105. By means of an email of November 4, 2021, the Arbitral Tribunal considered the Claimant's request in its communication of November 1, 2021 to be inadmissible, taking into account, in summary, the fact that in its communication of September 24, 2021, as well as those sent on previous occasions, the Claimant made no mention of the possibility that the emails that the Respondent submitted as Exhibit D-255 had been altered; therefore, by virtue of the absence of evidence that could point to the existence of alterations, the Tribunal still did not note any elements that could constitute evidence of alterations.
106. By means of an email communication dated November 9, 2021, the Claimant stated that it was clear from the aforementioned resolution that the Arbitral Tribunal was referring to an email that is not related to Empalme's petition or the Final Root Cause Report, stating that it understood that *the Tribunal's intention had been to have more elements that could prove the need to produce the emails that were the subject of its request in ".msg" format* and, therefore, noted that (i) the Spanish and English versions of the Report in PDF format were created using "PixelPlanet PdfEditor", which is a PDF editing application, but it is not clear who created the documents; and (ii) the Spanish document was created on May 11, 2021 and last modified on October 18, 2021, while the English document was also created on May 11, 2021 and last modified on September 20, 2021.
107. According to the Claimant, this shows that *the authorship of the documents is uncertain, the dates of their changes were very recent and both versions have the same creation date, which is prior to the document exchange phase and could imply that CFE had them in its possession prior to the stated date; and therefore, it was necessary for CFE to produce such emails in ".msg" format, in order to verify that they constitute the full and final versions of the Report, as well as the date on which the emails were sent.*

108. The Arbitral Tribunal deliberated on the arguments made by the Claimant in accordance with the communication cited in the previous paragraph and, by means of an email dated November 13, 2021, denied the Claimant's request taking into account in its considerations that:
- a. The Claimant's request lacks substance from a computer science point of view, since some of the concerns raised by the Claimant relate to the creation date of the requested document to keep it in the ".pdf." format "created" on that date, however the file may be subsequently modified to include a title or another addition, and the date is modified, as also occurs with any "M/Word" document: and, in that regard, the Arbitral Tribunal did not find any evidence that any alteration could have been made by CFE, nor did the Claimant provide any evidence to assume or presume that any such alteration had occurred; and,
 - b. in any case, the Claimant's arguments were extemporaneous in view of Article 32.1 of the Rules, taking into account that, while it could have immediately formulated its objection and consequent request, it was only at that procedural moment that the Claimant argued and presented elements of a possible alteration, for which the Arbitral Tribunal found no support.

109. The Arbitral Tribunal did not receive any objection with regard to what was resolved by Procedural Order No. 7, referred to in this section, or with regard to any issue that could have been considered to be pending, in light of the resolutions issued under Procedural Order No. 6, which preceded Procedural Order No. 7 and constitutes a predecessor of the latter.

Procedural Order No. 8

110. By means of an email dated October 28, 2021, the Claimant informed the Arbitral Tribunal that, by mutual agreement, the Parties had decided to postpone the date of delivery of the Pre-Hearing Briefs for a period equal to the time elapsed since the issuance of Procedural Order No. 6, thus modifying the following subsequent procedural milestones under the terms indicated in that email. The Respondent confirmed the consensus referred to by the Claimant by means of an email dated October 29, 2021.
111. The Arbitral Tribunal responded to the Parties by means of an email dated November 1, 2021, informing them of its agreement with the proposed changes to the first two procedural milestones and proposing alternative dates for the two remaining milestones, consisting of the pre-hearing and hearing videoconference, due to availability issues resulting from previous commitments.

112. After an exchange of communications between the Parties and the Arbitral Tribunal, the latter issued Procedural Order No. 8 dated November 12, 2021, sent to the Parties on the same date, which contains the Procedural Calendar modified by consensus, without prejudice to the possibility of its modification by the Arbitral Tribunal and, furthermore, established that the provisions contained in Procedural Order No. 1 and Procedural Order No. 4, would remain in force in their terms as long as they did not contradict what was resolved in Procedural Order No. 8.

Additional Pre-Hearing Briefs

The Parties filed their respective Briefs on the same day, in a materially simultaneous manner. The contents and terms of said Briefs are discussed below in the analysis of the merits of the case.

113. The Claimant submitted the Pre-Hearing Brief attached in .pdf version to its email dated November 29, 2021, transmitted at 23:42 hours, in which it reported that the expert reports and witness statements, with their respective exhibits, had been uploaded to the shared space in the same folder to which the documents corresponding to the Statement of Claim were uploaded, the title of which was changed to "LCIA 204661 | Exhibits to Empalme's Brief". In that email, the Claimant provided the necessary link to access the aforementioned folder. By means of a second email of the same date, the Claimant sent the same Brief to the Arbitral Tribunal in M/Word.
114. The Respondent submitted CFE's Pre-Hearing Brief attached in .pdf version to its email dated November 29, 2021, transmitted at 23:35 hours, in which it provided the access link to a shared folder with the exhibits referred to in its Statement of Defense. Regarding that folder, the Respondent stated that the platform used to share the information (Microsoft - OneDrive) assigned by default an expiration date for third parties to access the folder, which in this case was February 27, 2022, and therefore it might be necessary to renew the link, so it would be advisable to download the information produced.

Respondent's Objection to Empalme's Pre-Hearing Brief

115. By means of a letter dated December 10, 2021, attached to an email of the same date, the Respondent filed objections in connection with the Pre-Hearing Brief submitted by the Claimant. The Respondent's objections consisted of: (i) the alleged introduction of novel arguments in the Brief; (ii) the presentation of expert evidence in English, without attaching the corresponding Spanish translation; and (iii) the alleged violation of the limitation on the length of such Brief, through abuse of the features used by the word processing program.

116. On the same date and by the same means, the Claimant immediately requested a hearing to make representations no later than December 15, 2021 with regard to the objections of its counterparty. The Arbitral Tribunal granted the Claimant's request by means of an email dated December 10, 2021.
117. The Claimant submitted its representations in a timely manner by means of an email dated December 15, 2021, to which it attached a communication with the same date, to dispute the Respondent's objections. In that email, the Claimant provided the Dropbox link for access to the exhibits to that communication, furthermore, both in the email and in the communication in question it raises the possibility for the Arbitral Tribunal, if believes it is necessary, to summon the parties to discuss their respective points of view by telephone conference or videoconference.
118. The Arbitral Tribunal took into consideration the statements of the Parties in their respective submissions and, after deliberating on the same, by means of an email dated December 20, 2021, ruled on the issues raised by the Parties, in the following terms.
 - a. In addition to considering that both Parties had had [up to that point in the proceedings] sufficient opportunity to present their respective views on the issues in dispute, the Arbitral Tribunal believes that it has been sufficiently informed in that regard and therefore dismissed the Claimant's request for a conference to express oral arguments on what had already been expressed in writing with regard to the issues in dispute;
 - b. The Arbitral Tribunal accepted the Pre-Hearing Brief with the exhibits attached thereto, as submitted by Claimant, subject to the following paragraph;
 - c. The Parties would not have the opportunity to submit new written submissions prior to the Hearing, but the Arbitral Tribunal would take into account any representations made by the Parties, if any, at the Hearing or subsequently in their respective Closing Memorials, with regard to the body of arguments presented during the arbitration proceedings;
 - d. Regarding the Claimant's failure to submit a Spanish translation of the expert reports submitted with CFE's Pre-Hearing Brief, the Arbitral Tribunal took into account the Claimant's statements, but decided to proceed as expressly established in paragraph 19 of Procedural Order No. 1 and, consequently, ruled that the Claimant should submit the Spanish translations of such expert reports, setting a deadline for such submission, with the understanding that it would not be necessary to submit the Spanish translation of the exhibits to such opinions; and
 - e. Finally, with respect to the violation alleged by CFE against the Claimant, with regard to the extension of the length of its Pre-Hearing Brief by *abusing the features of the*

word processing program used by the Claimant, the Arbitral Tribunal considered the Respondent's objection inadmissible, considering that, although no editorial criteria were included in Procedural Order No. 1⁴⁵ and Procedural Order No. 4,⁴⁶ with regard to the size of the typeface to be used in said memorials, the alleged *abuse* attributed to the Claimant, in addition to being inconsequential, would be innocuous since it would not cause any prejudice to the Respondent or alter the procedural balance, since the number of excess pages was very minor in any case.

119. The Arbitral Tribunal did not receive any objection with regard to the Decision referred to in this section. On the other hand, in compliance with the Decision of the Arbitral Tribunal under the terms of paragraph (d) above, the Claimant submitted Spanish translations of the expert reports produced with Empalme's Pre-Hearing Brief, attaching them to an email dated January 6, 2022.

Cross-Examination of Witnesses and Experts

120. By means of email communications sent in due course on December 6, 2021, the Parties provided their respective lists with the names of the witnesses and experts of the opposing Party that they would intend to cross-examine during the Hearing, without any statements being made by any of the Parties in that regard.

Pre-Hearing Videoconference

121. After an exchange of communications between the Parties and the Arbitral Tribunal, it was agreed that the Pre-Hearing videoconference would be held on January 6, 2022. Early on January 5, 2022, the Arbitral Tribunal sent to each of the representatives of the Parties, through the platform itself and by means of an email, the invitation and information necessary to access the Zoom platform that, in accordance with the practice followed in this arbitration, would be used to conduct the videoconference.
122. In response to the email received from the Arbitral Tribunal with the aforementioned invitation, the Respondent stated by means of an email of the same date that:
- a. The Federal Electricity Commission formally and mandatorily established that, in order to protect confidential information transmitted and communicated in videoconferences, Microsoft *Teams* would be the only platform that could be used to hold any type of videoconference;
 - b. Since the above internal regulations result in an institutional limitation, the Respondent requested that the videoconference scheduled for Thursday, January 6, 2022, as well as

⁴⁵ Procedural Order No. 1, section X, ¶¶10 and 11.

⁴⁶ Procedural Order No. 4, point 4.

any other to be held in the arbitration, be conducted using the Microsoft *Teams* platform; and,

- c. Should the Arbitral Tribunal so require, CFE would be completely willing to organize and prepare the videoconference using the authorized virtual platform.

123. The Arbitral Tribunal deliberated with regard to the above and, in order not to hinder the holding of the videoconference on the agreed date and time or the procedure itself, by means of an email dated January 5, 2022 agreed, on that occasion to accept CFE's offer to organize and prepare the videoconference in question using the virtual platform that it has authorized, provided that the date and time thereof were not changed and that the respective invitation was sent as soon as possible to those who are required to connect to the videoconference, in accordance with the original invitation previously sent by the Arbitral Tribunal.
124. In addition to the fact that no objection or statement was made by the Claimant with regard to the foregoing and in accordance with what was indicated by the Arbitral Tribunal in its aforementioned communication, the Respondent took the necessary measures and on January 5, 2022 sent through the Microsoft *Teams* platform the respective invitation to those who are required to connect to the videoconference, providing them with the link through which it would be possible to enter the virtual room available on said platform, in order to participate in the videoconference, by means of an email sent on the same date.
125. The aforementioned videoconference was held on January 6, 2022 at 11:00 A.M., through the Microsoft *Teams* platform, with the participation of the representatives of the Parties designated by each of them for that purpose, as well as the three members of the Arbitral Tribunal. In the videoconference, the pending issues regarding the Hearing were discussed, the various details necessary for its organization and the logistics to be followed during the Hearing were defined, and the pertinent issues were agreed upon in order to reflect all of the above in the procedural order that would be issued for that purpose.

Procedural Order No. 9

126. The Arbitral Tribunal issued Procedural Order No. 9 dated January 10, 2022, of which notice was given to the parties by means of an email sent on the same date. For the issuance of this document, the Arbitral Tribunal took into consideration both the statements made by the Parties prior to the aforementioned videoconference and during the videoconference itself and, in particular, giving priority to the agreements reached regarding the organization and the conducting of the Hearing.
127. The provisions contained in this Procedural Order, as a result of the provisions of the previous paragraph, are summarized below:

- a. The Hearing would be held on February 15-18, 2022, in accordance with the schedule and order established in the Procedural Order, and would be conducted in a virtual or remote format, using the Microsoft *Teams* platform;
- b. Since the Arbitral Tribunal would at all times maintain control over the Hearing, the Parties would appoint an administrator, who would be responsible for organizing the platform for conducting the Hearing and whose responsibilities and tasks were set forth in detail in the Procedural Order, which also provided that the Parties should cover directly pay the costs of the Hearing in equal parts;
- c. The Parties would be responsible to provide a transcript or audio and/or video recording service, which would be the responsibility of the Parties, who would decide on the instrument to be used for such purpose, and provisions were included with regard to the subsequent delivery of the corresponding transcript or recording;
- d. With regard to the opening and closing arguments, the time available for them was indicated, with the express statement that the Parties should strictly adhere to the arguments made in their Briefs and the evidence submitted, and they may be assisted by electronic presentations and demonstrative documents, as long as they do not contain new evidence;
- e. With regard to the examination of witnesses and experts, the names were specified of those summoned by the opposing party to the offering Party who would appear for that purpose, as well as the order to be followed for their participation, the time allocated to the Parties and other matters;
- f. Considering the divergent positions expressed by the Parties, the Arbitral Tribunal decided that the Respondent could be assisted and use simultaneous translation during the Hearing, solely and exclusively in the case of those experts who would be questioned in English, and the costs of the translation would be covered by the Respondent, since it was in its interest; and,
- g. Unless previously authorized by the Arbitral Tribunal, the Parties may not submit new evidence or change their arguments or claims as set forth in their Closing Memorials; and prior to the adjournment of the Hearing, the Arbitral Tribunal and the Parties shall define the rules for the submission of such Briefs and their Statements of Costs.

128. On the same January 10, 2022, the Claimant stated by means of an email that, since in Procedural Order No. 9 *certain decisions were made on issues that were not addressed in the aforementioned pre-hearing videoconference, such as the platform on which the Hearing*

would be held, as well as details of the order and timing of the participations, it requested that the *pre-hearing conference be continued in order to address those points*. The Claimant insisted on its previous request, by means of an email dated January 11, 2022, in view of *the immensity of the administrative, organizational and coordination issues pending for the Hearing*.

129. The Arbitral Tribunal deliberated on the Claimant's request and, considering reasons of efficiency and with the objective of clarifying outstanding issues and reaching viable conclusions, by means of an email dated January 11, 2022, it urged the Parties to seek agreement on the pending administrative issues, organizational and coordination issues, and to submit the points on which they had not reached an agreement, if any, to the Arbitral Tribunal no later than January 17, 2022, to be discussed in a new videoconference on January 19, 2022, via Microsoft *Teams*, for which it would request the technical collaboration of the Respondent, if necessary.
130. By means of an email of January 17, 2022, the Claimant reported that, although the Parties had *expressed openness to conciliate some points*, which it did not specify, *there were others pending definition, on which the Parties had different positions*, for which the Claimant provided a list, with brief comments, of the issues it requested to be addressed at the videoconference. The Respondent, by mail of the same date, made similar statements to those of its counterparty and provided a list of topics for discussion at the videoconference, with the Respondent's position thereon.

Second Pre-Hearing Videoconference

131. Since circumstances beyond the control of the Arbitral Tribunal had arisen which prevented it from timely generating the invitation to hold the videoconference through the Microsoft *Teams* platform on the established date, it informed the Parties by means of an email dated January 14, 2022, in which it also requested the Respondent's technical support for that purpose.
132. The Respondent immediately expressed its consent by the same means. Likewise, the Claimant was informed on the same day, as indicated by means of an email of the same date, without objection. The Respondent generated and transmitted the individual invitations necessary to participate in the videoconference on January 18, 2022 through the Microsoft *Teams* platform, and also provided the link through which it would be possible to enter the videoconference, by means of an email sent on the same date,.
133. The second videoconference referred to above was held on January 19, 2022 at 11:00 A.M., through the Microsoft *Teams* platform, with the participation of the representatives of the Parties designated by each of them for that purpose, as well as the three members of the Arbitral Tribunal. In the videoconference, the pending issues regarding the Hearing were

discussed in accordance with the submissions made by the Parties in their communications dated January 17, 2022. At the videoconference, the Parties reached some agreements and expressed their commitment to continue the discussion of the pending issues.

Actions subsequent to the second Pre-Hearing videoconference

134. By means of email communications dated January 21, 2022, the Parties submitted to the Arbitral Tribunal their individual positions on the issues on which there was still divergence, as well as others matters pending definition because the Respondent was awaiting a response to internal consultations. In view of the proximity of the Hearing, by means of an email communication sent at the end of the day on January 24, 2021, the Arbitral Tribunal invited the Parties to make their best efforts to reach agreements as soon as possible on the outstanding issues, and to communicate those agreements and the final issues that had not been the subject of consensus to the Arbitral Tribunal.
135. Both Parties responded to the Arbitral Tribunal's invitation by means of an emails sent by the close of business on January 26, 2022. The Claimant, in addition to submitting certain information, made statements, some of which were in disagreement with the counterparty, requesting *that the period of discussions between the Parties be considered to be closed and that the Arbitral Tribunal decide what is appropriate*. For its part, in addition to submitting information, the Respondent made various statements, mainly in connection with the manner of conducting the Hearing, disagreeing with its counterparty on some points and questioning some issues arising from previous procedural rulings, without raising any specific objection.
136. By means of an email sent on Friday, January 28, 2022, the Claimant reported the location of its witnesses and experts during the Hearing, without referring to the statements made by the Respondent in its communication of January 26, 2022. On the same date and through the same channel, the Respondent subsequently generically reported the location of its witnesses and experts during the Hearing, for the reasons it explained, stating that the exact location of each of them would be communicated at a later date. The Respondent also did not refer to the statements made by Claimant in its communication of January 26, 2022. The Claimant sent an email to the Arbitral Tribunal on Monday, January 31, 2022, to ask the Arbitral Tribunal whether it had an approximate date on which it would issue its decision regarding the organization of the Hearing.

Procedural Order No. 10

137. Taking into account the statements of the Parties referred to above and giving priority to the agreements reached by them on the organization and logistics of the Hearing, the Arbitral Tribunal resolved the outstanding issues regarding the organization of the Hearing by means of Procedural Order No. 10 dated January 31, 2022, of which the Parties were notified by means of an email of the same date. The main points of that Order are summarized below.

- a. Information was provided regarding the starting date of the Hearing and its duration, the date on which each Party should send the list of persons who could be present and participate in the Hearing, as well as the warning that no person not on the respective list could be present at the Hearing and would not be admitted by the Hearing Administrator;
- b. It was confirmed that by agreement of the Parties that the Hearing would be held in a virtual format, using the Microsoft *Teams* platform;
- c. It was resolved that, at the proposal of the Claimant to which the Respondent made no counterproposal or objection, the Hearing would be administered by the International Court of Arbitration of the International Chamber of Commerce ("ICC"), which would act as Hearing Administrator and the fees for which would be paid by each of the Parties on a 50/50 basis, including the relevant provisions regarding the mechanics of the payment;
- d. The Agenda for the Hearing was established, providing that the Parties would send their opening statements to their counterparties and to the Arbitral Tribunal 15 minutes in advance, and confirming that they would not make closing oral arguments at the Hearing, by agreement of the Parties;
- e. It was also confirmed that, by agreement of the Parties, no procedural stage of the Hearing would be subject to a time limit, but that each Party would have a total of 12 hours to present its opening arguments and cross-examination, without prejudice to the fact that, in order to give each Party a reasonable opportunity to assert its rights, the Arbitral Tribunal could decide at the Hearing, at the request of the interested party and if it considers that there is just cause for doing so in light of the circumstances, to extend the time allotted to any Party as it deems reasonable;
- f. Since the Parties are not in agreement, the Arbitral Tribunal resolved that those who, having been offered as witnesses, had a senior management position within the organization, with management responsibility over the entity, could be present at the Hearing during the presentation of the Parties' opening arguments; and for this reason, the Claimant's attorney-in-fact and representative, who could not return before having testified as a witness, could be present at that phase of the Hearing, while the Respondent did not accredit any of its witnesses who were in that situation;

- g. A deadline was set for the Parties to report the exact location of their witnesses and experts during the Hearing and, by agreement of the Parties, representatives of the opposing Party may be present at the examination of witnesses and experts, at their own expense;
 - h. Various rules for the presentation of witnesses and experts were defined, with regard to the time available for the presentation of experts, the manner of conducting cross-examinations and the order of presentation of witnesses and experts, as well as the requirement, to which the Parties agreed, to send a copy of the examination folders to the opposing party and the members of the Arbitral Tribunal 15 minutes before proceeding with the respective cross-examination, which may not contain any document that had not been fully identified and included in the file;
 - i. It was also resolved that, as proposed by the Claimant and not objected to by the Respondent, the cross-examiner could use documents other than those contained in the folder, if deemed relevant in light of the answers given by the witness, provided that the document was part of the case file and reference was made to its identification number within the case file;
 - j. In accordance with Procedural Order No. 1, interpretation services would not be required for witnesses and experts who were examined in English, however the Respondent could be assisted by and use simultaneous interpretation during the Hearing, only for those experts and witnesses, at the Respondent's own expense as being in its own interest; and,
 - k. Since, as of the date of the Procedural Order, each Party had sent to the other the proposed quotation of a company that could be hired to provide the stenography service during the Hearing, without the Arbitral Tribunal being aware of such quotes, the Tribunal decided that, unless the Parties agreed otherwise, it would decide on the matter by Friday, February 4, 2022; to that end, it requested that the Parties provide it with copies of the aforementioned quotes.
138. By means of an email dated February 3, 2022, the Claimant (i) reported that the Parties had agreed to hire SEC to provide the stenography services, attaching a copy of the confirmation thereof; (ii) reporting on the status of the hiring of ICC to act as Hearing Administrator; and (iii) reported that it had sent a communication to its counterparty on the previous day, proposing options regarding the order of presentation of witnesses and experts at the Hearing.
139. The Respondent made statements on the same day and by the same means with respect to the Claimant's statements in the aforementioned email; according to which (i) it confirmed the agreement regarding the stenography services; (ii) it reported on the status of the process, within the administrative areas of CFE, for the contracting of the ICC Hearing Center; and (iii) it expressed its disagreement with the proposals received from the Claimant in the

aforementioned email and reported that it had sent a counterproposal to the opposing party.

140. The Claimant communicated with the Arbitral Tribunal by means of an email dated February 4, 2022 on the agreement of the Parties regarding the sequence to be followed for conducting the Hearing, making several comments on the matter, independent of such agreement. Likewise, the Claimant expressed that, although according to Procedural Order No. 9 a test run of the platform to be used for the Hearing should be held on February 8, 2022, the ICC, the Hearing Administrator, had reported that the test run could be held on Friday, February 11, 2022; and in that regard it would be important to know which simultaneous translation service CFE would be using in the Hearing.
141. By means of an email dated February 5, 2022, the Respondent stated that it would subsequently send a communication confirming the points agreed upon by the Parties and outlining points on which they disagree and would also respond to the Claimant's representations on the fairness of the proceedings, on the occasion of the proposed order on the manner of conducting the Hearing. The Respondent did so by means of an email dated February 8, 2022, *following up on Claimant's communication of February 4, 2022*.
142. In its email dated February 8, 2022, the Respondent (i) confirmed that *the order of the proceedings expressed in the proposal* [inferred from the Claimant's proposal] *is the one to which the Parties have agreed*; (ii) *it is noted that the Claimant has taken the opportunity* [inferred from the communication of February 4, 2022] *to make some statements on points that have been part of the exchanges between the Parties and other arguments that are new to CFE*; on which *the Respondent transmits its positions*, in which the Respondent extensively disputes what the Claimant stated in the aforementioned communication; and (iii) without indicating a time, it requested that the test run be held on February 11, 2022, so that CFE's witnesses, experts and translators could participate, from the respective locations and equipment that they intend to use in the Hearing.
143. The Arbitral Tribunal informed the Parties by means of an email sent on February 8, 2022 that, in view of the fact that the Parties and the ICC were considering the possibility of having the test conference on February 11, 2022, it would be available between 12:00 noon and 3:00 p.m. Mexico City time to participate in the test. The Claimant, by means of an email of the same date, requested that the test be conducted at 12:00 noon *so that people in another time zone could connect*. The Respondent, on the other hand, expressed by means of an email sent

on the same day its agreement that the test conference could be held on February 11, 2022 at 12:00 noon Mexico City time.

144. By means of a new email dated February 8, 2022, the Claimant referred to the Respondent's email of the same date and, in that regard, disputed its argument that *the admission of the expert reports submitted by EMPALME in its Pre-Hearing Brief violated its right to oppose*; it reiterated its statement contained in its email dated February 4, 2022, with regard to the use of the *chess clock* and the speaking times at the Hearing; it stated its schedule preference for the test run, adding that the Respondent should state whether it would use simultaneous or successive translation at the Hearing, to determine whether the Microsoft *Teams* platform could be used; and, should state whether it had already made the corresponding payments to the ICC and the stenography service provider. The Respondent stated that it would use simultaneous translation and subsequently confirmed this point.⁴⁷
145. By means of an email dated February 9, 2022, the Claimant communicated the location of its witnesses and experts, as well as the names of those who would be present in the cross-examination of CFE's witnesses and experts; it confirmed the date and time for the performance test; provided the form received from the ICC, so that the Parties could send it the information specified therein on who would be present at the Hearing, in order to make it possible for them to enter; and it also referred to the payment of the services for the administration of the Hearing and stenography.
146. The Claimant followed up on the foregoing by means of an email dated February 10, 2022, in which it reported that, *in view of CFE's silence regarding the pending payments to the ICC and the stenographer, in order not to jeopardize the Hearing, the Claimant would make such payments the following day and would cover the amounts corresponding to CFE for the time being*. In addition, it pointed out that the Respondent's failure to comply with the deadline set in Procedural Order No. 10 to report the location of its witnesses and experts and requested that the Arbitral Tribunal instruct the Respondent send such information in order to be able to exercise its right to have representatives present at the cross-examination; and, finally, it reported that it had already sent the ICC the document requested for the performance test. On the same date, the Arbitral Tribunal invited the Respondent by means of an email to send the information in question as soon as possible.
147. The Respondent responded to the Arbitral Tribunal's request on the same day by means of an email, reporting the location of its witnesses and experts, as well as the Respondent's decision not to send CFE personnel to attend the cross-examinations of Empalme's witnesses

⁴⁷ Respondent's email dated February 13, 2022.

and experts. The Respondent attached to this communication the list of participants in the Hearing to which it referred in its email, reporting that it had sent a consolidated list of attendees to the ICC. It also reported that it had already made the corresponding payment to the ICC and was in contact with the stenography service provider to agree on the details of its payment in accordance with CFE's internal procedure, so that its presence at the Hearing was not affected.

148. The Hearing Administrator sent to registered Hearing participants both the invitation to enter the test run and a link that would be valid for all the days of the Hearing.
149. On February 11, 2022, a brief videoconference was held, under the coordination of the Hearing Administrator, with the participation of some of the persons who would attend the Hearing as representatives of the Parties, experts, witnesses or persons with other functions, as well as the three members of the Arbitral Tribunal, in order to conduct a test run of the platform to be used for the Hearing. At the end of the test, it was agreed that, at the request of the Hearing Administrator, a brief test run would be conducted before the start of the Hearing.
150. Since in the test run it was found that due to technical limitations inherent to the Microsoft *Teams* platform, it could not be viable to hold the Hearing by that means due to the lack of the necessary functions to use it with the simultaneous translation service, after verification with the Hearing Administrator regarding the possibility of changing the platform, the Respondent obtained the necessary internal authorization and it was agreed that the Hearing would be held using the Zoom platform and the Hearing Administrator proceeded accordingly.
151. The Parties exchanged email communications throughout the day on February 13, 2022, agreeing that the transcript of the Hearing would be in Spanish, including the examination of witnesses and experts who would appear in another language, subject to the condition that the official recording of the Hearing would reflect the original language in which the proceedings were conducted, without overlapping simultaneous translation.

Hearing

152. The Hearing was held virtually, through the Zoom platform, on February 14, 15, 16 and 17, 2022, and was conducted in accordance with the provisions of Procedural Order No. 10 and complementary provisions of the latter. As part of the Arbitral Tribunal's analysis in light of the memorials, communications and documents that constitute the case file, as well as the

statements made by the Parties during the entire proceedings, reference is made in this award to issues of any type that arose during the Hearing and that are relevant for the purposes of such analysis.

153. Consequently, this chapter provides details regarding some issues that, without being strictly related to the merits of the dispute, but to the hearing of the case and the conduct of the Hearing, the Arbitral Tribunal believes it is relevant to mention them below. Other relevant issues discussed at the Hearing related to the merits of the dispute and extracted from the transcript of the Hearing, are summarized below in a chapter included for that purpose.
154. At the conclusion of the presentation of the issues at the Hearing, the Arbitral Tribunal asked the representatives of the Parties when they expected to have the transcript of the Hearing and the time they would require in order to review it, discuss it and agree on the final text of the transcript. Mr. Roberto Tirado, who was responsible for the recording and transcript of the Hearing and who was present at the Hearing, stated that he would deliver the Transcript to the representatives of the Parties for their review on February 23, 2022.
155. The time required for the review of the Transcript, discussion of the Transcript by the Parties and the release of the final text of the Transcript were the subject of discussion, and in view of the distance between the Parties' points of view, it was agreed that these issues would be decided later by the Arbitral Tribunal, taking into account the submissions of both Parties. It was also agreed that the Parties would discuss the length, content and editorial criteria that should govern the Parties' Closing Memorials.
156. At the end of the Hearing, the President asked the Parties if they wished to address any additional issues before concluding the Hearing.⁴⁸ The Claimant's representative indicated that they did not, and only wished to "... *thank you and the other members of the Arbitral Tribunal for your time and the study you have devoted to this matter.*"⁴⁹ However, the Respondent's representative expressed his wish to make some remarks.⁵⁰
157. Referring to the pre-hearing briefs that the Parties had agreed would be filed simultaneously, the Respondent's representative mentioned that the pre-hearing brief filed by the Claimant "*ended up being a true reply to CFE's answer*" which "*resulted in a situation in which, under*

⁴⁸ LCIA Transcript 204661 - 17-02-2022 (Part 4) Final, page 65. Fernando Estavillo-Castro: "..., *unless someone has something to say, that they would like to add, we could say goodbye and thank you all for your participation and collaboration.*"

⁴⁹ LCIA Transcript 204661 - 17-02-2022 (Part 4) Final, page 65. Rodrigo Zamora: "*No additional issue on our part, Mr. President, other than to thank you and the other members of the Arbitral tribunal for your time and the study you have devoted to this matter...*"

⁵⁰ LCIA Transcript 204661 - 17-02-2022 (Part 4) Final, page 65. Antonio Grayeb Cervantes: "*Gentlemen and arbitrators, if you will allow us, we would like to make some remarks before concluding with the hearing.*"

*in accordance with the procedural calendar, CFE did not have an opportunity to rebut the contents of these expert reports". In that regard, the Respondent's representative stated that "... since CFE did not have an opportunity to rebut these expert reports, we, as CFE's representatives, consider that due process and CFE's opportunity to defend itself was violated", and the representative added that "Gentlemen and arbitrators, we consider that it particularly contravenes the provisions of Article 14 of the Arbitration Rules, specifically Article 14.4, which grants the Arbitral Tribunal the right to conduct the proceedings as long as it grants the parties the same opportunity of defense, or a full opportunity of defense."*⁵¹

158. Co-Arbitrator Siqueiros questioned the Respondent's representative's statements and then pointed out that the Tribunal had endeavored throughout the arbitration proceedings to provide equal opportunity to both Parties to present their case: *"... not only have we endeavored, but I believe we have succeeded in allowing it to be a fair process in which both parties have been given the opportunity, the same opportunity to present their position".* Regarding the apparent disadvantage that Empalme's Pre-Hearing Brief was practically a reply to the Statement of Defense, to which the Claimant provided expert evidence, co-arbitrator Siqueiros recalled that, before issuing Procedural Order No. 1, the Arbitral Tribunal accepted the proposal of both Parties to agree on the guidelines and terms of the Procedural Calendar, and that it requested comments from both Parties before it was issued

⁵¹ LCIA Transcript 204661 - 17-02-2022 (Part 4) Final, pages 65-67. Antonio Grayeb Cervantes: *"... as the Arbitral Tribunal is aware, at the time of the presentation of the Claimant's pre-hearing brief, the Commission expressed its opposition or in the sense of opposing the admission of the expert reports that were marked as AP-002, AP-003, AP-004" "... as we analyzed the content of these reports, we realized that when they were included in this pre-hearing brief, in the pre-hearing brief they became a real reply to CFE's statement of defense".*

"So, in this sense, remembering that the plan was that the pre-hearing briefs were to be filed simultaneously, we believe that this resulted in a situation where, under the procedural calendar, CFE did not have an opportunity to rebut, a scheduled opportunity under the procedural calendar to rebut the content of these expert reports."

"Gentlemen arbitrators, since CFE did not have an opportunity to rebut these expert reports, the representatives of CFE consider that due process and CFE's opportunity of defense have been violated."

"The foregoing, gentlemen arbitrators, we consider that it particularly contravenes the provisions of Article 14 of the Arbitration Rules, specifically could be 14.4, where the Arbitral Tribunal is granted the power to conduct the proceedings provided that it grants the parties the same opportunity of defense, or a full opportunity of defense."

"We consider that this was the opportunity for the colleagues and the representatives of Empalme to clarify these statements and these points that came to light from the appearance of the experts, the foregoing, gentlemen arbitrators, from our perception, we consider that it not only represents a failure to comply with the rules applicable to the arbitration, but represents a total disregard for good faith and legality in the conduct of the proceedings applied by the claimant and without which, needless to say, the claimant has so often referred to these principles of procedural good faith."

prior to its issuance, and comments were requested from both Parties. The Procedural Order allowed the Pre-Hearing Briefs to be accompanied by exhibits.⁵²

159. The representative of the Respondent then stated that he acknowledged that he was not accusing "... *the Arbitral Tribunal of misconduct. On the contrary, we believe that the Arbitral Tribunal has done what it could with what it had in those moments of discrepancies between the parties, we are grateful for those efforts*". Subsequently, he stated "... *I reiterate, this is not an accusation against the Arbitral Tribunal. Mr. Siqueiros, I apologize if that has been the perception you have given or how the message you have received, but it is not CFE's intention to say that.*"⁵³

Hearing Transcript

160. By means of an email dated February 24, 2022, the Arbitral Tribunal requested the Parties to inform it whether they had received the transcript of the Hearing and whether they had agreed on the deadline for its joint review by the Parties and the definition of the final version of the transcript. In said email, the Arbitral Tribunal indicated to the Parties that, unless they had reached an agreement, after discussing this issue the Tribunal considered that a period of 20 days, following the date on which the draft version of the Transcript had been delivered to the Parties, would be reasonable and sufficient for the Parties to agree on the final text of the Transcript, the delivery of which, in turn, would determine the deadline for the submission of the Parties' Closing Memorials.

⁵² LCIA Transcript 204661 - 17-02-2022 (Part 4) Final, pages 69-70. Eduardo Siqueiros: "*I simply make a comment, because from the references that Mr. Grayeb commented on, I notice that he inferred, if he did not say it directly, that the Tribunal has allowed the violation of the respondent's rights and that due process has not been followed, nor has he been given the same opportunity to present his case, as required by the arbitration rules.*"

"The Tribunal submitted to the parties and received their comments, prior to the issuance of procedural order number one, and procedural order number one allowed for the submission of pre-hearing briefs and that evidence would and could be presented. If they were not submitted by the commission, that was their right; if they were submitted by the claimant, that was their right as well, but for them to say that they did not have the same opportunity seems to me really inappropriate in this proceeding"

"... as a member of this Tribunal I am entitled to say that not only have we endeavored, but I believe we have succeeded in allowing it to be a fair process in which both parties have been given the opportunity to present their position."

⁵³ LCIA Transcript 204661 - 17-02-2022 (Part 4) Final, page 70. Antonio Grayeb Cervantes: "*Gentlemen arbitrators, if you allow me to make a clarification on this point, on what Mr. Siqueiros has just commented.*"
"I am sorry, if that was the message I conveyed in my first intervention, but we are not accusing the Arbitral Tribunal of misconduct. On the contrary, we believe that the Arbitral Tribunal has done what it could with what it had in those moments of discrepancies between the parties, we are grateful for those efforts.

"this is not an accusation against the Arbitral Tribunal. Mr. Siqueiros, I apologize if that has been the perception you have given or how the message you have received, but it is not CFE's intention to say that.

"So, with this I conclude my participation. I do not know if there are any additional comments."

161. The Claimant informed about the above by means of an email on the same day, stating that the preliminary version of the transcript should be delivered on February 25, 2022; and, with respect to the Closing Memorials, the Parties agreed that they should be no longer than 45 pages, including footnotes and not including cover page, table of contents and list of exhibits, using size 12 font with 1.5 pts and "normal" margins; and their contents should be limited to the issues, proceedings and documents that were the subject matter of the arbitration proceedings and the Hearing, and the Parties may only refer to documents that are included in the case file, including the exhibit number. Likewise, with respect to costs, the Parties agreed that, where applicable, the costs should be referenced to the corresponding payment voucher or invoice.
162. By means of an email dated February 25, 2022, the Respondent confirmed the agreements indicated by the Claimant on the criteria that would govern the submission of the Closing Memorials. Since, when the Parties reported on their agreements regarding such Memorials, they did not report the existence of any agreement regarding the deadline for the joint review of the Transcript and the definition of the final version of the Transcript, the deadline for that purpose would be the one determined by the Arbitral Tribunal in its email dated February 24, 2022, cited above.
163. On March 17, 2022, the Claimant submitted the stenographic versions of each of the days of the Hearing, which constitute the Transcript, attaching them to an email sent on that date, in which, in addition to stating that such documents contained the modifications and adjustments to which the Parties had agreed and were therefore the final versions thereof, it requested that the Arbitral Tribunal indicate to the Parties the date on which the deadline for submitting the Closing Memorials would expire.
164. By means of an email dated March 18, 2022, the Arbitral Tribunal requested that if the Respondent had any comments to make regarding the Claimant's email dated March 17, 2022, that it must do so during the course of the same day in order to be in a position to rule on the Claimant's request contained in the second paragraph of said email. The Respondent responded the same day by the same means, confirming the content of the final documents of the stenographic versions of each of the days of the Hearing, sent by the Claimant on March 17, 2022. Consequently, by means of an email sent on the same date, the Arbitral Tribunal indicated to the Parties that, in accordance with the Procedural Calendar, the deadline for the submission of the Closing Memorials would be Monday, May 2, 2022.

CFE and Empalme Closing Memorials

165. The Parties timely filed their respective Closing Memorials, both dated May 2, 2022. The Claimant did so by means of an email sent on the same date, to which it attached the Closing Memorial, stating that the corresponding exhibits are identified with the number A-114 and were added to the folder mentioned therein, providing the necessary link to access the folder. The Respondent, for its part, also did so by means of an email sent on the same date, to which it attached CFE's Closing Memorial.
166. By means of an email sent on May 26, 2022, the Arbitral Tribunal informed the Parties that, by virtue of the submission of the aforementioned Memorials, the Office of the LCIA Clerk requested that the Arbitral Tribunal inform both the Office of the LCIA Clerk and the Parties of the date on which it expects to finalize the Award, as well as the time set aside for its deliberations.
167. In the same email, the Arbitral Tribunal informed the Parties that it was in the process of analyzing the various documents in the case file, in light of the memorials submitted by the Parties, and therefore expected to finalize the Award by the end of September 2022, therefore it would be conducting the necessary periodic deliberations with regard to the disputed issues.
168. In addition to the above, at the request of the LCIA, the Arbitral Tribunal informed the Parties in the same email that, in accordance with the Rules, the LCIA would only forward an electronic version of the Award and a certified copy to the Parties as a courtesy, unless the Parties requested an original version of the Award. In view of the above and at the request of the LCIA, the Arbitral Tribunal requested that the Parties confirm whether they will require an original signed version of the Award, which will then be sent to them by the LCIA in due course, either in lieu of or in addition to the certified copy.
169. The Parties responded to the Arbitral Tribunal's request by means of an email dated May 27, 2022, stating that, in addition to the certified copy of the Award, and the certified copy to be sent to the Parties by the LCIA as a courtesy, the Parties believe it is necessary to receive an original signed version of the Award. The LCIA responded by means of an email dated May 30, 2022, stating that it had noted the above request and further indicating that, as far as the LCIA is concerned, it will not require an original of the Award and that the corresponding original counterparts should only be sent to the Parties. By virtue of the foregoing, the Arbitral Tribunal will proceed accordingly, as it informed the LCIA and the Parties by means of an email dated May 30, 2022.

X. CLAIMS OF THE PARTIES

170. The claims set forth below are those expressed by the Parties in the petitions contained in their respective memorials and pleadings; likewise, since the body of the same include various claims and petitions that are not expressly mentioned in their petitions, they have also been taken into consideration by the Arbitral Tribunal in order to resolve the disputed issues in their entirety.

Claimant

171. As expressly stated by the Claimant, its claims and requests are that the Tribunal:

- A. Declare that Empalme's claim and petitions are admissible.⁵⁴
- B. Declare that Empalme complied with its obligations under the terms of the Contract.⁵⁵
- C. Declare that the Operational Warranty expired on June 9, 2019.⁵⁶
- D. Determine the status regarding each of the Minor Defects and Warranty Claims, as well as the consequences derived therefrom.⁵⁷
- E. Determine that the enforcement of the HSBC Letter of Credit by CFE is illegal and abusive.⁵⁸
- F. Order CFE to reimburse Empalme for the excess amount enforced under the Letter of Credit.⁵⁹
- G. Order CFE to pay the claims submitted and derived from the memorials filed by Empalme during the arbitration proceedings.⁶⁰
- H. Declare that the termination of the Contract is appropriate, and granting of the corresponding Final Delivery Certificate and Settlement for this purpose.⁶¹
- I. Bifurcate the proceeding so that the Contract Closing Statement may be

⁵⁴ Statement of Claim, page 302, ¶ A; Empalme's Pre-Hearing Brief, page 27, ¶A; Empalme's Closing Memorial, page 39, ¶A.

⁵⁵ Statement of Claim, page 302, ¶ B; Empalme's Pre-Hearing Brief, page 27, ¶ B; Empalme's Closing Memorial, page 39, ¶ B.

⁵⁶ Empalme's Pre-Hearing Brief, page 27, ¶ C; Empalme's Closing Memorial, page 39, ¶ C.

⁵⁷ Statement of Claim, page 302, ¶ C; Empalme's Pre-Hearing Brief, page 28, ¶ D; Empalme's Closing Memorial, page 39, ¶ D.

⁵⁸ Statement of Claim, page 302, ¶ D; Empalme's Pre-Hearing Brief, page 28, ¶ E; Empalme's Closing Memorial, page 39, ¶ E.

⁵⁹ Statement of Claim, page 302, ¶ E; Empalme's Pre-Hearing Brief, page 28, ¶ F; Empalme's Closing Memorial, page 39, ¶ F.

⁶⁰ Statement of Claim, page 302, ¶ F; Empalme's Pre-Hearing Brief, page 28, ¶ G; Empalme's Closing Memorial, page 39, ¶ G.

⁶¹ Statement of Claim, page 302, ¶ G; Empalme's Pre-Hearing Brief, page 28, ¶ H; Empalme's Closing Memorial, page 39, ¶ H.

signed based on the guidelines and orders imposed by the Arbitral Tribunal.⁶²

- J. Order CFE to pay Financial Costs when applicable.⁶³
- K. Order CFE to compensate Empalme for any other additional declaratory or penalty claims, breach, damages, injury, interest, etc., arising from the facts and claims that are the subject matter of this arbitration.⁶⁴
- L. Issue all appropriate declarations in order to resolve the disputed issues in this arbitration in favor of Empalme.⁶⁵
- M. Order CFE to pay the Costs of the Arbitration.⁶⁶

Respondent

172. As expressly stated by the Respondent, its claims and requests are that the Tribunal:

- A. Declare that CFE acted within the framework of the Contract, and therefore the acts carried out for the enforcement of the HSBC Guarantee are justified.⁶⁷
- B. Declare that Empalme's action is improper and that its claims other than the claim that CFE has accepted for payment be dismissed.⁶⁸
- C. Declare that Empalme has not performed its obligations under the terms of the Contract.⁶⁹
- D. Declare that the Claimant failed to resolve the Minor Defects.⁷⁰
- E. Declare that the Claimant failed to resolve Minor Defects and Warranty Claims under the terms agreed upon in the Contract and, consequently, rule that the enforcement by CFE of the HSBC Letter of Credit is legal.⁷¹
- F. As a consequence of the foregoing, declare that it is improper to order CFE to reimburse Empalme for the enforced amount of the HSBC Letter of Credit.⁷²

⁶² Empalme's Closing Memorial, page 39, ¶ M.

⁶³ Statement of Claim, page 302, ¶ H; Empalme's Pre-Hearing Brief, page 28, ¶ I; Empalme's Closing Memorial, page 39, ¶ I.

⁶⁴ Empalme's Pre-Hearing Brief, page 28, ¶ J; Empalme's Closing Memorial, page 39, ¶ K.

⁶⁵ Empalme's Pre-Hearing Brief, page 28, ¶ L; Empalme's Closing Memorial, page 39, ¶ L.

⁶⁶ Statement of Claim, page 302, ¶ I; Empalme's Pre-Hearing Brief, page 28, ¶ J; Empalme's Closing Memorial, page 39, ¶ J.

⁶⁷ Statement of Defense, page 695, ¶ A; CFE's Pre-Hearing Brief, page 25, ¶ III.

⁶⁸ Statement of Defense, page 696, ¶ B; CFE's Pre-Hearing Brief, page 25, ¶ I; CFE's Closing Memorial, page 45, First Petition.

⁶⁹ Statement of Defense, page 696, ¶ C.

⁷⁰ CFE's Pre-Hearing Brief, page 25, ¶ II.

⁷¹ Statement of Defense, page 696, ¶ D; CFE's Pre-Hearing Brief, page 25, ¶ IV.

⁷² Statement of Defense, page 696, ¶ E.

- G. Declare that the Claimant should comply with its obligation to restore the amount enforced by CFE to the HSBC Letter of Credit.⁷³
- H. Declare that, as a consequence of the Claimant's failure to resolve the Minor Defects, CFE has incurred expenses covered by the Contract Performance Bond.⁷⁴
- I. Declare that CFE has the right to enforce the Performance Bond to resolve the Minor Defects and Warranty Claims arising from Claimant's breach.⁷⁵
- J. Declare the reimbursement for the works performed in solving Minor Defect 331 (MD331), due to the lack of response by the Claimant.⁷⁶
- K. Declare CFE's reservation of rights, *related to the fact that the Claimant failed to comply with its duty to resolve the Minor Defects and Warranty Claims, and that it therefore reserves its contractual rights.*⁷⁷
- L. Dismiss the claim seeking to order CFE to pay the relief requested by the Claimant because it is improper and those that are eventually deduced from the memorials filed during the arbitration proceedings, since they were not filed at the time the *litis* was established.⁷⁸
- M. Declare that the termination of the Contract is improper, denying the right to the issuance of the Final Delivery Certificate and the Closing Statement of the Works.⁷⁹
- N. Order the Claimant to pay to CFE all legal costs and expenses incurred by CFE in this arbitration, in the proportional part of those claims that are denied because the Claimant has no cause of action.⁸⁰
- O. Notify CFE, before the Final Award is rendered, to update the expenses incurred in the Minor Defects and their associated Financial Costs.⁸¹

⁷³ Statement of Defense, page 696, ¶ F; CFE's Pre-Hearing Brief, page 25, ¶ VI.

⁷⁴ CFE's Pre-Hearing Brief, page 25, ¶ V.

⁷⁵ Statement of Defense, page 696, ¶ G.

⁷⁶ CFE's Pre-Hearing Brief, page 25, ¶ VII.

⁷⁷ CFE's Closing Memorial, page 45, Third Petition.

⁷⁸ Statement of Defense, page 696, ¶ H.

⁷⁹ Statement of Defense, page 696, ¶ I.

⁸⁰ Statement of Defense, page 696, ¶ J; CFE's Pre-Hearing Brief, page 25, ¶ VIII; CFE's Closing Memorial, page 45, Second Petition.

⁸¹ CFE's Pre-Hearing Brief, page 25, ¶ IX.

XI. DISPUTED ISSUES TO BE RESOLVED

173 From the claims and petitions of the Parties, which are referred to above under the terms in which they were set forth by the Parties in their various memorials and pleadings, it is clear that the main points in dispute which the Arbitral Tribunal must resolve are the ones set forth below:

- a. Determine the expiration date of the Operational Warranty stipulated in Clause 20.1 of the Contract, in view of Clause Four of the Fifth Amendment Agreement to the Contract, dated March 4, 2019.
- b. Determine whether the Respondent's enforcement of the HSBC Letter of Credit was unlawful and abusive or in accordance with the provisions of the Contract.
- c. Determine whether the Claimant fulfilled its obligations under the Contract with regard to the resolution of the Minor Defects (MDs) and, if so, determine the status of such MDs, as well as the consequences arising therefrom.
- d. If the Claimant has breached its obligations under the Contract with regard to resolving the Minor Defects (MDs), determine the effect of the Claimant's breach.
- e. Determine whether the Claimant complied with its obligations under the Contract, with regard to the resolution of the Warranty Claims (WCs) and, if so, determine the status thereof, as well as the respective consequences.
- f. If the Claimant has breached its obligations under the Contract, with regard to the resolution of the Warranty Claims (WCs), determine the effect of the Claimant's breach.
- g. Determine whether the Respondent's actions were excessive in the enforcement of the HSBC Letter of Credit and, if so, determine whether the Respondent should reimburse the Claimant for the excess amount.
- h. Determine whether or not the Claimant's claim for expenses inherent to the enforcement of the HSBC Letter of Credit by the Respondent is admissible.
- i. Determine whether or not the Claimant's claim for work progress not recognized in the Fifth Amendment Agreement to the Contract is admissible.
- j. Determine whether or not the Claimant's claim for expenses and costs arising from the Agreement dated January 16, 2019, entered into between Empalme and

CFE on the application of Clause 25.5 of the Contract (25.5 Agreement) is admissible.

- k. Determine whether or not the Claimant's claim for additional or unforeseen work performed by Empalme, expenses and costs arising from the Agreement dated January 16, 2019, entered into between Empalme and CFE on the application of Clause 25.5 of the Contract (25.5 Agreement) is admissible.
- l. Determine the merits of the Claimant's claims and petitions for the full settlement of the Contract, as a consequence of its previous claims.
- m. Determine the admissibility of the Claimant's request that the Arbitral Tribunal order the Final Acceptance of the Plant and order the Parties to sign the Closing Statement in accordance with the Law of Public Works and Related Services.
- n. In accordance with Article 28 of the LCIA Arbitration Rules, decide which of the Parties or in what proportion each of them shall pay the "Arbitration Costs" as determined by the LCIA, as well as the "Legal Costs" as determined by the Arbitral Tribunal.

XII. ANALYSIS AND CONCLUSIONS OF THE ARBITRAL TRIBUNAL

Expiration date of the Operational Warranty

174. Empalme argues that, in accordance with the Fifth Amendment Agreement entered into on March 4, 2019, the Operational Warranty expired on June 9, 2019⁸² and it provides a number of elements in support of its position:

- a. The text of the Fifth Amendment Agreement itself;
- b. The negotiations that gave rise to the aforementioned Amendment Agreement;
- c. The acceptance by CFE of the Banorte Letter of Credit with that maturity date;
- d. CFE's non-opposition to the proposed warranty extension; and,
- e. The statements made by CFE subsequent to June 9, 2019, accepting that the Operational Warranty had already expired.

⁸² Statement of Claim, Paragraph IV.

175. For its part, CFE maintains that the expiration date of the Operational Warranty should be July 2, 2019.

Background Information

176. Clause 11.1 b) of the Contract contains an agreement to deliver an irrevocable standby letter of credit in favor of CFE, corresponding to the Operational Warranty (the "Banorte Letter of Credit"), which should be equivalent to 10% of the Price of the Contract, in order to guarantee Empalme's full compliance with the obligations derived from the Contract in connection with the Operational Warranty covered by Clause 20.1. In Clause 11.2 of the Contract, it was agreed that this letter of credit would remain in force until the Final Acceptance Certificate of the Power Plant had been issued.
177. In view of the various postponements of the Test Program, mainly caused by the lack of authorization from CENACE to perform 100% Load Tests, the term of the Operational Warranty was amended through the Fifth Amendment Agreement to the Contract, under which, in Clause Four, CFE and Empalme established a specific date for the expiration of the Operational Warranty.

178. In the Clause Four of the Fifth Amendment Agreement, the Parties agreed that:

"FOUR: The Parties ratify the Contractor's obligation to deliver the Operational Warranty, which amounts to the sum of \$47,684,436.92 US dollars.

Likewise, the Parties, considering that the extensions of the Scheduled Provisional Acceptance Date have been for reasons beyond the Contractor's control, it shall be understood that the term of the Operational Warranty began on the date resulting from the Provisional Acceptance Date minus the extensions covered by the second, third, fourth and fifth Agreements, which shall remain in force for one year from the beginning of its term, thereby amending the definition of "Warranty Period" established in Clause 1.1.

Should the Commission be interested in the Operational Warranty remaining in force for a period of 1 year from the Provisional Acceptance, in accordance with the provisions of the "AGREEMENT BETWEEN THE PARTIES ON THE APPLICATION OF CLAUSE 25.5 TO FULFILL THE PURPOSE OF CONTRACT PIF-017/2015", the Commission shall request that the Contractor extend the Operational Warranty. The Contractor is obligated to grant the extension upon submission of the appropriate offer and acceptance thereof by the Commission.

Likewise, the Guaranteed Annual Equivalent Availability Factor (GAEAF) will remain at the contractual value of 99.1% until June 9, 2019, when the Operational Warranty expires".

Empalme's Position

179. Empalme argues that it is clear from the Fifth Amendment Agreement that both Parties agreed on June 9, 2019 as the date determined for the expiration of the term of the Operational Warranty and that, if CFE was interested in having the Operational Warranty remain in force for a period beyond June 9, 2019, that is, for a period of one year following the Provisional Acceptance, Empalme should have submitted an offer to CFE for the extension of the warranty.
180. Empalme further notes that it delivered the Banorte Letter of Credit to CFE corresponding to the Operational Warranty on March 26, 2019,⁸³ which established an expiration date of June 9, 2019, accompanied by the Provisional Acceptance Report as an attachment.
181. Empalme adds that certain drafts of the Fifth Amendment Agreement reaffirm that date, and therefore CFE should have been clear about this, since even the Banorte Letter of Credit had an expiration date of June 9, 2019 and CFE accepted that Letter of Credit, which indicates:
- "This Letter of Credit shall remain in effect until, and shall automatically expire on one of the following dates, whichever occurs first (the "Termination Date"): (I) the date on which the Issuing Bank receives written notice from the Commission that the facility covered by the Agreement has achieved final acceptance, (II) the date on which the Maximum Guaranteed Amount has been paid by the Issuing Bank against the submission by the Commission of one or more demands for payment and (III) June 9, 2019 ("the Expiration Date")."*⁸⁴ [emphasis added by Empalme]
182. Empalme mentions that, as proposed, it submitted a proposal to CFE to extend the term of the Banorte Letter of Credit, in which it clearly proposed to extend the Operational Warranty from June 10, 2019 to March 25, 2020.⁸⁵ When CFE did not accept the proposal, Empalme notified CFE on June 10, 2019⁸⁶ that, since CFE did not exercise its right to contract the Extension of the Operational Warranty, the warranty expired on June 9, 2019.⁸⁷
183. On the other hand, Empalme indicates that, in subsequent meetings and at CFE's request, on June 12, 2019,⁸⁸ it sent the "proposed extension of the Operational Warranty Rev. 1" to CFE.

⁸³ CFE-POM27039-C-EPCDP-CFE-0417 (A-049)

⁸⁴ Banorte Letter of Credit, attached to CFE-POM27039-C-EPCDP-CFE-0417 (A-049)

⁸⁵ First Offer to Extend the Operational Warranty, p.6 (A-055)

⁸⁶ Official Correspondence CFE-POM27039-C-EPCDP-CFE-0441 dated June 10, 2019. (A-056)

⁸⁷ Statement of Claim ¶ 114 and Empalme's Pre-Hearing Brief, ¶ 26-27.

⁸⁸ Warranty Extension Rev. 1 120619 (A-057)

The changes to the proposal did not affect the extension of the Operational Warranty, which would have been effective from June 10, 2019 to March 25, 2020.⁸⁹

184. Empalme also maintains⁹⁰ that CFE sent a letter on June 13, 2019⁹¹ in response to the confirmation that the Operational Warranty had expired, in which it stated: "*1. In accordance with the provisions of Clause Four of the Fifth Amendment Agreement, the Operational Warranty expired on June 9, 2019 [...]*".
185. Empalme also points out that, pursuant to the provisions of Article 1851 of the Federal Civil Code, "*if the terms of a contract are clear and leave no doubt as to the intention of the contracting parties, the literal meaning of its clauses will prevail.*"⁹²
186. In response to CFE's contention that the reference to June 9, 2019 in the last paragraph of Clause Four of the Fifth Amendment Agreement only relates to the measurement of the Guaranteed Annual Equivalent Availability Factor (GAEAF), Empalme affirms that, although it is true that the Parties agreed that the contractual value of the Guaranteed Annual Equivalent Availability Factor would be maintained until June 9, 2019, it is also true that, as clearly stated in that paragraph, the reason for the determination of that date corresponds to the fact that it is precisely the expiration date of the Operational Warranty.⁹³
187. Finally, Empalme adds that "*... surprisingly and contradictorily, only a few days after making the aforementioned statements, by means of an official correspondence dated June 17, 2019,*⁹⁴ *CFE radically changed its position on Clause Four of the Fifth Amendment Agreement and the validity of the Operational Warranty. In that letter, CFE began to maintain that the Operational Warranty expired on July 2, 2019, a position it has maintained to this day.*"⁹⁵

CFE's Position

188. For its part, CFE agrees that the background of the Fifth Amendment Agreement was the failure by CENACE to authorize the Performance Tests and the 100% Load Tests; and it argues that, for that reason, in Clause One of the Fifth Amendment Agreement the Parties

⁸⁹ Warranty Extension Rev 1 120619; Offer, ¶ 3. SCOPE, p. 6 (**A-057**)

⁹⁰ Statement of Claim, ¶ 121-123.

⁹¹ 742.160/JALV-083/19 (**A-047**)

⁹² Empalme's Pre-Hearing Brief, ¶ 23.

⁹³ Empalme's Pre-Hearing Brief, ¶ 30.

⁹⁴ 742.160/JALV-086/19 (**A-048**)

⁹⁵ Statement of Claim, ¶ 81.

agreed to extend the Scheduled Provisional Acceptance Date by 158 days, establishing August 24, 2018 as the new date.⁹⁶ but that, *"due to the cumulative delays attributable by (sic) the Contractor in the completion of the Project, it was not possible to achieve the Scheduled Provisional Acceptance Date (August 24, 2018) in the Fifth Amendment Agreement"*.⁹⁷

189. The Parties signed the Provisional Acceptance Certificate ("PAC") on March 26, 2019, in which it was stipulated that, pursuant to Clause 18.1 of the Contract, a Provisional Acceptance Report would be formalized, to be signed on March 26, 2019, which would indicate, among others, the Minor Defects detected that should be corrected by the Contractor pursuant to Clause 18.4 of the Contract, within 60 days after the issuance of the PAC, in other words, before May 25, 2019.⁹⁸ This Report was indeed signed on that date, and an Exhibit II was attached thereto listing total of 586 Minor Defects (MDs).⁹⁹
190. The PAC considered that the extensions of the Scheduled Provisional Acceptance Date had been for reasons beyond Empalme's control, and therefore it should be understood that the term of the Operational Warranty began on the date resulting from the Provisional Acceptance date (that is, March 26, 2019), minus the extensions included in the Second (73 days), Third (24 days), Fourth (12 days) and Fifth (158 days) Amendment Agreement; and would remain in effect for one year from the effective date.
191. In the opinion of CFE,¹⁰⁰ the Contractor acted in bad contractual faith and failed to point out that the Fifth Amendment Agreement establishes that:
- "Likewise, considering that the extensions of the Scheduled Provisional Acceptance Date have been for reasons beyond the Contractor's control, the Parties shall understand that the term of the Operational Warranty began on the date resulting from the Provisional Acceptance Date minus the extensions included in the second, third, fourth and fifth Agreements, which shall remain in force for one year from the beginning of its term, thereby amending the definition of "Warranty Period" established in Clause 1.1."* [emphasis added by CFE]
192. Accordingly, CFE argues that the term of the Operational Warranty must begin with the issuance of the PAC, minus the extensions covered by the second, third, fourth and fifth

⁹⁶ Statement of Defense, ¶¶ 23 and 24.

⁹⁷ Statement of Defense, ¶¶ 25 to 28.

⁹⁸ Exhibit D-004.

⁹⁹ Exhibit D-002.

¹⁰⁰ Statement of Defense, ¶ 30.

Amendment Agreements; and adds that the Fifth Amendment Agreement also states in Clause One that the new date for the issuance of the PAC is August 24, 2018.¹⁰¹

193. CFE makes a distinction between the "Operational Warranty" and the "Warranty Period" and points out that Empalme erroneously confuses them. While (a) the "Warranty Period", according to Clause 1.1 of the Contract is defined as "*... the period beginning on the Provisional Acceptance Date of the Power Plant and ending on one of the following dates, whichever occurs first: (i) the first anniversary of the Provisional Acceptance Date corresponding to the Power Plant; or (ii) the date determined pursuant to Clause 20.4 "Extension of the Warranty Period"; and (b) the "Operational Warranty" is defined in Clause 11.1(b) as "... an irrevocable standby letter of credit in favor of the Commission issued in Mexico ... in order to guarantee the full, proper and absolute performance by the Contractor of all its obligations under this Contract in accordance with Clause 20.*"¹⁰²
194. Therefore, according to CFE, the validity of the Operational Bond (Banorte Letter of Credit) in no way implies that the Contractor's obligations are extinguished during the "Warranty Period."¹⁰³
195. CFE insists that the Warranty Period is a result of the agreements of the Fifth Amendment Agreement -ratified in the PAC- consisting of a period that began on July 2, 2018 and ended on July 2, 2019; and both Clause Four of the Fifth Amendment Agreement and the PAC state that the Warranty Period began on the date the PAC was issued, minus the extensions covered by the second, third, fourth and fifth Agreements, and will remain in effect for one year from the beginning of its validity. CFE summarizes it in the following *basic arithmetic*:¹⁰⁴

- Extension under Amendment Agreement No. 2 - 73 days
- Extension under Amendment Agreement No. 3 - 24 days
- Extension under Amendment Agreement No. 4 - 12 days
- Extension under Amendment Agreement No. 5 - 158 days
- Total days Extended = 267 days
- Date of Provisional Acceptance - March 26, 2019

Therefore,

Warranty Period Commencement Date: July 2, 2018
(March 26, 2019; minus 267 days of extension,

¹⁰¹ Statement of Defense, ¶ 31.

¹⁰² Statement of Defense, ¶ 35.

¹⁰³ Statement of Defense, ¶ 36.

¹⁰⁴ Statement of Defense, ¶ 42.

equal to July 2, 2018).

If the Warranty Period is one year, it expires on July 2, 2019.

196. In response to the Claimant's arguments when it attempts to indicate that CFE accepted the Banorte Letter of Credit with an expiration date of June 9, 2019 and that this shows that the Warranty Period expired on that date, CFE argues that this is erroneous, since the letter of credit is only an instrument that covers the Warranty Period, and is not the term of that period, since Empalme could have guaranteed with different letters of credit the aforementioned Warranty Period, which expired on July 2, 2019.¹⁰⁵ According to CFE, there is no basis to conclude that CFE has accepted any reduction of the Warranty Period with the receipt and acceptance of the Banorte Letter of Credit.¹⁰⁶

Analysis of the Arbitral Tribunal

197. It is an established fact that both the Fifth Amendment Agreement (March 4, 2019) and the Provisional Acceptance Certificate (March 26, 2019), establish that the validity of the Warranty Period will be computed in the same way; and likewise, both Parties agree that the origin of the change was the delays of CENACE referred to above, as well as the need to provide protection to Empalme against the technical and legal uncertainty that would derive from the repeated postponement of the Performance and Load Tests with 100% Capacity.
- a. Fifth Agreement: *"... the term of the Operational Warranty began on the date resulting from the Provisional Acceptance Date minus the extensions included in the second, third, fourth and fifth Agreements, which shall remain in effect for one year from the beginning of its term ..."*.
 - b. PAC: *"Likewise, considering that the extensions of the scheduled date of Provisional Acceptance have been due to causes beyond the contractor's control, the Parties shall understand that the term of the Operational Warranty began on the date resulting from the Provisional Acceptance Date minus the extensions included in the Second, Third, Fourth and Fifth Amendment Agreement, which shall remain in force for one year from the beginning of its term. The foregoing is supported by the provisions of Amendment Agreement No. 5"*.
198. As argued by CFE, a simple arithmetic operation results in a determination of the start date and, therefore, the termination date of the Operational Warranty. According to the calculations to that effect, which neither party disputes, two fundamental premises result: (a) the date of Provisional Acceptance is the date on which the PAC was signed (March 26,

¹⁰⁵ Statement of Defense, ¶¶ 52 and 53.

¹⁰⁶ Statement of Defense, ¶ 57

2019); and (b) the cumulative number of days in the extensions covered by the amendment agreements, giving a total of 267 days. When the 267 days of those extensions are subtracted from March 26, 2019, which was the date of Provisional Acceptance, the result is that the Warranty Period Commencement Date should be July 2, 2018. Consequently, if the Warranty Period has a duration of one year, it indisputably expires on the date maintained by CFE; that is, July 2, 2019.

199. Although it is true that the Fifth Amendment Agreement states in the last paragraph of Clause Four that June 9, 2019 is "*... the date on which the Operational Warranty expires*"; and it is also true that there are other elements that support this (reference to that date in the Banorte Letter of Credit,¹⁰⁷ CFE's official correspondence 742.160/JALV-083/19),¹⁰⁸ the Arbitral Tribunal notes that, beyond CFE's argument that the last paragraph of that clause only relates to the measurement of the Guaranteed Annual Equivalent Availability Factor (GAEAF), which the Tribunal considers relevant, the Claimant's claim with regard to that paragraph is totally illogical taking into account the fact that the Fifth Amendment Agreement was signed on March 4, 2019, and at that time the date on which the PAC would be issued, which would be the starting point to determine the term of the Warranty Period and the Operational Warranty, was obviously unforeseeable.
200. For this reason, in this context, it is clearly inappropriate to attribute the scope intended by the Claimant to the last paragraph of Clause Four of the Fifth Amendment Agreement, since it would imply rendering meaningless the preceding paragraphs of such clause, which precisely constitute the *raison d'être* of such clause, as well as of the agreement in question. To interpret said clause and its last paragraph in such a manner would imply to *understand as included in them cases different from those on which the Parties intended to contract*, and it would also be to give that clause a *totally inappropriate meaning in order to produce an effect* that is contrary to the provisions of Articles 1852 and 1853 of the Federal Civil Code. In the opinion of the Arbitral Tribunal, all of the foregoing leads to the conclusion that the mention of *June 9, 2019* in the manner indicated cannot be interpreted as anything but carelessness or a mistake comparable to a miscalculation, but not as a manifestation of the intent of the Parties.
201. In order to understand the will of the Parties, under the terms of Article 1851 and following of the Federal Civil Code,¹⁰⁹ the Arbitral Tribunal must first conduct a grammatical and, if

¹⁰⁷ Exhibit A-049 to the Statement of Claim.

¹⁰⁸ Exhibit A-049 to the Statement of Claim.

¹⁰⁹ Pursuant to 1851 of the Federal Civil Code, "[i]f the terms of a contract are clear and leave no doubt as to the intent of the contracting parties, the literal meaning of its clauses shall prevail" and "[i]f the words appear contrary to the evident intent of the contracting parties, the latter shall prevail over the former". Response to Objection, ¶¶ 140 et seq; CL-5, Articles 1851 to 1857 of the Federal Civil Code.

necessary, a systematic interpretation of all of the paragraphs of Clause Four of the Fifth Amendment Agreement, as well as of the provisions of the PAC; also interpreting *some clauses based on the others* in accordance with the *purpose and nature of the Contract*, under the terms of Articles 1854 and 1855 of the aforementioned code and also taking into account the provisions of Article 1853 mentioned above.

202. From a grammatical interpretation of the aforementioned clause, it is clear that the intent of the Parties was to establish the Warranty Period Commencement Date based on a specific reference: the signature date of the PAC. Likewise, it is clear that, in order to determine the validity period of the Operational Warranty, a number of days equivalent to the extensions agreed upon in the Second, Third, Fourth and Fifth Amendment Agreements would need to be subtracted from the PAC signature date.
203. Not only is there no doubt of this, but it is also evident that the reasoning that guided the intent of the Parties was to recognize that the extensions had not been necessary due to the fault of Empalme (or due to the fault of CFE), but due to omissions by CENACE. By discounting the number of days established as extensions, a benefit was given to Empalme to recognize from what date the "provisional acceptance" of the Power Plant that is the subject of the Contract should "*in fact*" be recognized.
204. Pursuant to Article 1851 of the Federal Civil Code, "*... if the words appear to be contrary to the evident intent of the contracting parties, the latter shall prevail over the former.*"
205. The basis for defining the date that the Parties wished to specify as the Warranty Period Commencement Date is clear, and we must also interpret that wording in the context of the agreements (that is, the five amendment agreements) that were entered into by the Parties, from which it is clear that the delays were not attributable to Empalme. If the intent of the Parties in each of those agreements was to extend the term for the performance of various Critical Events, and specifically to redefine the Scheduled Date for Provisional Acceptance each time, then that is the term that must be considered for purposes of defining the Effective Date of the Operational Warranty.
206. Consequently, by virtue of all the foregoing considerations and in view of the discrepancy between the terms of the express contractual provisions (Clauses 11.1, 18.1 and 20 of the Contract and Clause Four of the Fifth Amendment Agreement) and the allusion to June 9, 2019 in certain related documents, which however do not constitute agreements of wills *per se* and therefore are not binding for the Parties

(Banorte Letter of Credit,¹¹⁰ Empalme's proposals to CFE for the extension of the Operational Warranty,¹¹¹ CFE's letter to Empalme in response to its first proposal),¹¹² the Arbitral Tribunal concludes that the references to June 9, 2019, should be considered to be an error that by its nature constitutes a simple "miscalculation". Under the terms of Article 1814 of the Federal Civil Code, a calculation error only gives rise to rectification. It does not even operate as a defect in consent.

207. Evidently, the appropriate date according to the terms of the Contract and Clause Four of the Fifth Amendment Agreement, that is, July 2, 2019, has relevance in this case because the claims presented by CFE during the term of the Operational Warranty must be resolved by Empalme, if and when they are appropriate based on their nature as well as under the terms and conditions of the Contract.

Legal or Illegal Enforcement of the HSBC Letter of Credit

Empalme's Position

208. Immediately after formulating its Request for Arbitration,¹¹³ the Claimant formulated the aforementioned Petition for Emergency Measures, which it then expanded,¹¹⁴ due to the partial enforcement of the HSBC Letter of Credit carried out by the Respondent, which Empalme has always considered to be a violation of the terms of the Contract.
209. In its Statement of Claim, Empalme continues this same line of argument and states that the Performance Bond *"is specifically connected to a guarantee of full performance of the obligations of Empalme contained in Clause 20.2 of the Contract ... [and in addition] there are specific obligations covered by the Operational Bond ... [and] Of particular interest in this case is the text of Clauses 20.5 and 20.6 of the Contract ... since, as will be explained, CFE enforced the HSBC Letter of Credit (Performance Bond) on its own whim, without observing the contractual provisions and, specifically, the fact that each of the Letters of Credit was related to specific contractual obligations."*¹¹⁵
210. According to Empalme, the enforcement of the HSBC Letter of Credit violates the Contract because it did not meet the conditions required for that purpose, since according to Clause 11.3 of the Contract (Collection of the Guarantees),¹¹⁶ *"The Commission shall have the*

¹¹⁰ Exhibit A-049 to the Statement of Claim.

¹¹¹ Exhibits A-055 and A-057 to the Statement of Claim.

¹¹² Exhibit A-047 to the Statement of Claim.

¹¹³ Request for Arbitration.

¹¹⁴ Petition for Emergency Measures and Extension of Petition.

¹¹⁵ Statement of Claim, ¶¶ 165-168.

¹¹⁶ Statement of Claim, ¶ 171.

right to enforce the Performance Bond and the Operational Bond for the purpose of collecting (iv) any other amounts provided in favor of the Commission in the Contract, including, without limitation, those relating to deductions for breach of the Contractor's obligations under the Contract. In the event that the Commission enforces the Performance or Operational Bond for any of the reasons specified above, the Commission shall notify the Contractor of the amount withdrawn and the reasons for the withdrawal ..."

211. Empalme states¹¹⁷ that the aforementioned Clause 11.3 establishes the hypotheses that would result in the enforcement of the Letters of Credit, as well as the requirements to do so, such as *"... informing Empalme of both the amount withdrawn and the reasons for the withdrawal a requirement [that] was disregarded by CFE. In that regard, Empalme argues that it was not found to be in a breach situation that could have justified such enforcement and, furthermore, the enforcement of the HSBC Letter of Credit was improper since it was not linked to Warranty Claims; since "...while the Performance Bond (the HSBC Letter of Credit) is related to the obligations contained in Clause 11.1 (a) of the Contract and in Clauses 20.2 and 18.5 of the Contract; the Operational Bond (Banorte Letter of Credit) refers only to those issues covered by Clause 11 (b) of the Contract".*
212. Empalme argues that *"... CFE was only authorized to enforce each Letter of Credit when the breach events covered by each Letter of Credit occurred. The Letters of Credit could not be enforced interchangeably, since each had its own specific purpose, objective and purpose ... [and] CFE enforced the HSBC Letter of Credit linked to the Performance Warranty and, therefore, it was only applicable for those breach events inherent to subsection a) of Clause 11 of the Contract, notwithstanding the fact that the reasons for which it was enforced included alleged breach events inherent to the alleged failure to respond to Warranty Claims, which would be subject to Clauses 20.5 and 20.6 of the Contract and consequently covered only by the Operational Warranty (Banorte Letter of Credit)."*¹¹⁸
213. With regard to the Operational Warranty, the Claimant states¹¹⁹ that in compliance with the provisions of the Fifth Amendment Agreement, pursuant to which it was obliged to submit an offer to CFE in the event that it was interested in the Operational Warranty remaining in force for an additional period of one year from the date of Provisional Acceptance, by means of official correspondence dated May 13, 2019, it submitted a proposal to CFE to extend the

¹¹⁷ Statement of Claim, ¶¶ 172 to 179.

¹¹⁸ Statement of Claim, ¶¶ 180 and 181.

¹¹⁹ Statement of Claim, ¶¶ 110 to 118.

Operational Warranty, which was received by CFE on the same date¹²⁰ to extend the Warranty from June 10, 2019 to March 25, 2020,¹²¹ that is, after June 9, 2019, the expiration date of the Operational Warranty as agreed in the Fifth Amendment Agreement.

214. The Claimant adds that the Respondent did not object or express any type of disagreement regarding the term for which the extension was proposed, which amounts to a tacit acknowledgement or acceptance that the Operational Warranty expired on June 9, 2019 and therefore its extension would take effect as of June 10, 2019; and likewise, CFE and Empalme held several meetings to discuss the proposal, followed by a "Revision 1" of the proposal but without changing the validity period, and finally CFE did not accept Empalme's proposal and chose not to extend the Operational Warranty.
215. In addition to the foregoing, Empalme reiterates that *"...CFE has failed to indicate the circumstances and reasons that would have led it to enforce the HSBC Letter of Credit. In its brief communication of April 2, 2020, CFE indicated as the basis for its actions certain Warranty Claims and Minor Defects that allegedly had not been addressed by Empalme.... [and] assuming that this is true, which is denied and refuted, this would not entitle CFE to enforce the HSBC Letter of Credit, since this guarantee is not intended to cover these alleged breach events", which makes the enforcement of the HSBC Letter of Credit unlawful "... setting aside the contractual stipulations that determined that the HSBC Letter of Credit could not be enforced by CFE in connection with the Warranty Claims."*¹²²
216. Empalme also argues that, in order to be in a position to enforce the HSBC Letter of Credit for breach events related to responses to Minor Defects, according to Clause 18.4 of the Contract CFE was obliged to prove the existence of unjustified delays in responding to such defects, and it in no way did so; and furthermore, *"... CFE simply did not complete a prior analysis for the enforcement of the HSBC Letter of Credit [and] it was not until CFE enforced the HSBC Letter of Credit that CFE initiated Contract Proceedings and awarded contracts related to the Minor Defects and Warranty Claims that were the subject of the enforcement."*¹²³
217. According to the Claimant, the foregoing *"... implies that, at least with respect to the Minor Defects and Warranty Claims related to the aforementioned contract proceedings, CFE did not have a certain amount with regard to what it would cost to resolve them. In other words, CFE proceeded to enforce USD \$13,627,892.00 of the HSBC Letter of*

¹²⁰ Official Correspondence CFE-P0M27039-C-EPCDP-CFE-0428 dated May 13, 2019 (A-054).

¹²¹ First Offer to Extend the Operational Warranty, p.6 (A-055).

¹²² Statement of Claim, ¶¶ 182 to 184.

¹²³ Statement of Claim, ¶¶ 188 to 220.

Credit without even being certain of the amounts that would be required to resolve at least certain Minor Defects and Warranty Claims on the basis of which it conducted the enforcement [and] purports to lead the Arbitral Tribunal to believe that it would not be obliged to provide a detailed description of the concepts and reasons for the enforcement..."¹²⁴

CFE's Position

218. The Respondent states ¹²⁵ that the Claimant erroneously maintains that the *Operational Warranty* is the same as the *Warranty Period*, and that they are two different instruments established in the Contract, and in support of its position it refers to the definition of the *Warranty Period* in Clause 1.1 thereof, in the following terms:

"1.1 Definitions. ...

"Warranty Period" means with regard to the Project, the period commencing on the Provisional Acceptance Date of the Plant and ending on either (i) the first anniversary of the Provisional Acceptance Date pertaining to the Plant; or (ii) the date determined in accordance with Clause 20.4 "Extension of the Warranty Period", whichever occurs first."

219. In connection with the foregoing, the Respondent notes¹²⁶ that as of the Fifth Amendment Agreement, pursuant to the second paragraph of Clause Four thereof "*... it shall be understood that the term of the Operational Warranty began on the date resulting from the Provisional Acceptance Date [March 26, 2029] minus the extensions included in the second, third, fourth and fifth Agreements [267 days], which shall remain in force for one year from the beginning of its term [July 2, 2018], thereby amending the definition of "Warranty Period" set forth in Clause 1.1*".
220. Likewise, with regard to the Operational Warranty, the Respondent notes¹²⁷ that Clause 11.1 b) of the Contract provides that:

"... the Contractor shall deliver to the Commission, at its own cost and expense within 15 (fifteen) Days after the notice of completion of the Works in question referred to in Clause 18.1, an irrevocable standby letter of credit, in favor of the Commission issued in Mexico by any Mexican development banking institution or... in order to guarantee the full, proper and absolute performance by the Contractor of all its obligations under this Contract in accordance with

¹²⁴ Statement of Claim, ¶¶ 221 to 223.

¹²⁵ Statement of Defense, ¶¶ 32 and 33.

¹²⁶ Statement of Defense, ¶ 34.

¹²⁷ Statement of Defense, ¶ 35.

Clause 20 (the "Operational Warranty").

The amount of the Operational Warranty shall be equal to 10% (ten percent) of the Price of the Contract."

221. With regards to the scope of the Operational Warranty, the Respondent refers¹²⁸ to Clause 20.1 of the Contract ("Operational Warranty"), which regulates it in the following terms:

"20.1 Operational Warranty. The Contractor guarantees that, upon Provisional Acceptance of the Power Plant, the Works related to the Power Plant will strictly comply with the Contract Specifications and that they will be manufactured and performed in accordance with Industry Standards in a technically efficient and complete manner, as well as the continued operation of the Works. Notwithstanding the formal receipt of the Works, the Contractor shall be obliged, throughout the applicable Warranty Period, to respond for the Defects resulting from the Works, for hidden defects, and for any other liability it may have incurred, under the terms set forth in this Contract and in the Federal Civil Code...."

222. In addition to the above, the Respondent¹²⁹ argues that *"... it can be understood that the validity of this Operational Bond (Letter of Credit) in no way implies that the Contractor's obligations are extinguished since said instrument is to guarantee the Works related to the Power Plant during the specified "Warranty Period"..."* and highlights the importance of defining the Performance Bond in accordance with Clause 11.1 a) of the Contract, according to which:

"...the Contractor shall deliver to the Commission, at the Contractor's cost and expense, within 15 (fifteen) Days following the date of notification of the Award, an irrevocable standby letter of credit in favor of the Commission issued in Mexico by any Mexican development banking institution or ...in order to guarantee the full, proper and absolute performance by the Contractor of all its obligations under this Contract other than its Obligations set forth in Clause 20.2 (the 'Performance Bond')."

223. Proceeding similarly to the case of the Operational Warranty, the Respondent refers¹³⁰ to Clause 20.2 of the Contract, which provides as follows:

"20.2 Performance Warranties. The Contractor warrants that the Plant will achieve compliance with the Guaranteed Values. Failure to comply with any Guaranteed Value other than the GAEAF, shall entitle the Commission to deduct the Amounts set forth in Exhibit 13 from the Price of the Contract. The provisions of Clause 30.2 shall apply in the event of a dispute.

¹²⁸ Ibid.

¹²⁹ Statement of Defense, ¶¶ 36 and 37.

¹³⁰ Statement of Defense, ¶ 37.

Failure to comply with the GAEAF shall entitle it to collect the corresponding compensation from the Operational Warranty under the terms of Exhibit 13."

224. To conclude its arguments regarding these issues, the Respondent states¹³¹ that, as can be seen in the contractual definitions cited above, the Contract indicates what constitutes the Operational Warranty or Bond and the Warranty Period and points out that *".... the first is nothing more than a Banking Instrument (Standby Letter of Credit) that covers the Warranty Period" and "There is an abundance of evidence that gives accredits that the Operational Warranty (Banorte letter of credit) consists solely of a Letter of Credit that covers certain obligations of the Contractor, however, it **does not determine the term of the Warranty Period**".*
225. Finally, the Respondent¹³² states that *"[t]he only agreement between the Parties regarding the Banorte Letter of Credit Operational Warranty is that **"Likewise, the Guaranteed Annual Equivalent Availability Factor (GAEAF) will be maintained with the contractual value of 99.1% until June 9, 2019, the date on which the Operational Warranty expires"**; and "[t]here is no basis to determine that with the receipt of the Banorte Letter of Credit consisting of the Operational Warranty, for which the validity is indicated as June 9, 2019, this Commission has accepted any reduction in the Warranty Period agreed upon in the Fifth Agreement and the PAC for the Empalme I Combined Cycle Power Plant"; and "as can be deduced from a reading of the Contractor's arguments, at no time does it allude to or intend to modify the established Warranty Period since it had already been perfectly agreed upon, therefore, even though such instrument [the Banorte Letter of Credit] will indicate (sic) that it expires on June 9, 2019, **this does not extinguish the Contractor's obligation to renew this Letter of Credit for the entire applicable Warranty Period**" [emphasis added by the Respondent].*
226. In support of its position regarding the alleged *admissibility of the enforcement of the HSBC Letter of Credit*, the Respondent reiterates its previous statements regarding the contractual provisions referred to above, which it supplements with the assertion that *"... Clause 11.3 "Enforcement of Guarantees" of the Contract, stipulates that the Commission shall have the right to enforce the Performance Bond and Operational Bond for the purpose of collecting ... [among others] any other amounts stipulated in the Contract in the favor of the Commission, including, without limitation, those related to deductions for breach of the Contractor's obligations under the Contract... [among others] any other amounts provided in favor of the Commission in the Contract, including, without limitation, **those relating to deductions for breach of the Contractor's obligations under the Contract**".* The Respondent

¹³¹ Statement of Defense, ¶¶ 38 to 53.

¹³² Statement of Defense, ¶¶ 55 to 61.

also states that, according to the same clause, "*In the event that the Commission enforces the Performance Bond or Operational Bond for any of the reasons specified above, the*

Commission shall notify the Contractor of the amount withdrawn and the reasons for the withdrawal" and "*The Contractor shall have 10 (ten) Business Days from receipt of the notice of enforcement to restore the letter of credit to the amount in effect at the time immediately prior to the withdrawal made by the Commission.*"¹³³ [emphasis added by the Respondent]

227. The Respondent asserts that *the enforcement of the HSBC Letter of Credit was carried out in accordance with the Contract* and, in that regard, refers that upon issuance of the PAC on March 26, 2019, the Parties formalized the Provisional Acceptance Report, in which 586 Minor Defects (MDs) were listed which Empalme was required to address and resolve within the following 60 days, as well as a total of 247 Warranty Claims (WCs) identified during the Warranty Period that "*.. began on July 2, 2018 and expired on July 2, 2019, which the Contractor was required to repair or replace and which, in accordance with Clause 20.4 'Extension of the Warranty Period', the Contractor was required to guarantee one year after the repair or replacement*". According to the Respondent, these were not resolved by the Claimant and therefore CFE "*... determined that it was necessary to enforce the HSBC Letter of Credit on March 12, 2020 in the amount of \$13,627,892.00 USD ... [and] ... In view of this situation, the Commission asserts that it had the right to enforce the Collection of the Performance Bond (HSBC Letter of Credit) ... as well request the restoration*" of the enforced amount of that bond.¹³⁴
228. In referring to the Banorte Letter of Credit and the Operational Warranty, the Respondent clarifies that there were 247 Warranty Claims during the Warranty Period (July 2, 2018 to July 2, 2019); which Empalme was required to repair or replace, in addition to guaranteeing them for one year by extending the Operational Bond or by providing another letter of credit covering the amount of that impact pursuant to Clause 20.4 of the Contract; and Claimant did nothing of the kind.
229. The Respondent adds that, even though the Claimant states in its Statement of Claim that it offered CFE an extension of the Banorte Letter of Credit, and CFE refused, Empalme fails to state that the cost of the extension would be covered by the Respondent; and the latter, in addition to considering it excessive, believed it was contrary to the provisions of Clauses Four of the Fifth Amendment Agreement and 3.6 (*sic*)¹³⁵ of the Agreement between the Parties on the Application of Clause 25.5 of the Contract, as well as Clauses 11.2, 20.1 and 20.4 of the Contract; particularly because CFE did not request that Empalme extend the Banorte Letter of Credit (Operational Bond) for one year, but to extend it only for the 247

¹³³ Statement of Defense, ¶¶ 151 and 152.

¹³⁴ Statement of Defense, ¶¶ 153 to 162.

¹³⁵ Should read "3.4".

Warranty Claims or to deliver another letter of credit to cover those claims, pursuant to Clause 20.4 of the Contract.¹³⁶

230. By virtue of the foregoing, Respondent argues that "[d]ue to Claimant's breach and its refusal to renew the Operational Bond or to deliver another Letter of Credit to cover its obligations related to the 247 WCs that arose during the Warranty Period covered by in Clauses 20.1 and 20.4 of the Contract, as well as the failure to resolve the MDs ... the Commission, in strict compliance with the provisions of Clause 11.3 (iv), had the right to enforce the Performance Bond (HSBC Letter of Credit) for the breach in failing to resolve the MDs and WCs, as well as failure to deliver a Letter of Credit to cover the 247 WCs."¹³⁷

Analysis of the Arbitral Tribunal

231. As can be seen from the foregoing, for the completion of the Project that was the subject of the Contract, for which Empalme was responsible, the latter contracted the various obligations specified in the Contract, the term of which refers to a determined or determinable time period (Warranty Period), and are itemized under the headings referred to as "Performance Warranty" and "Operational Warranty", both generically and jointly referred to as "Warranties", the scope of which is subject to the terms and conditions specified in each case in the Contract and the performance of which the Claimant was obliged to guarantee through two equivalent instruments, consisting of two standby letters of credit, both irrevocable, which were materialized through the "HSBC Letter of Credit" and the "Banorte Letter of Credit", which support the Performance Warranty and the Operational Warranty, respectively.
232. The Performance Warranty, backed by the HSBC Letter of Credit, pursuant to Clause 11.1(a) of the Contract, is for "*the full, proper and absolute performance by the Contractor of all of its obligations under [this] Contract other than its obligations set forth in Clause 20.2*"; that is, *all* of Empalme's obligations, *except* those related to the performance of the Guaranteed Values (which are specified under that heading in Clause 1.1 of the Contract and in its Exhibit 13). The compliance with such Values "*shall be determined during the Performance Tests*" defined therein. Likewise, the scope of Clause 20.2 expressly *excludes* the GAEAF ("Guaranteed Annual Equivalent Availability Factor"), which is subject to its own rules; compliance with those requirements is covered by the Operational Warranty.
233. In turn, the Operational Warranty was backed by the Banorte Letter of Credit and, pursuant to Clause 11.1(b) of the Contract, its purpose is "*the full, proper and absolute performance*

¹³⁶ Statement of Defense, ¶¶ 163 to 173.

¹³⁷ Statement of Defense, ¶ 174.

by the Contractor of all of its obligations under [this] Contract in accordance with Clause 20". Accordingly, all obligations of Empalme that are not covered by the Performance Warranty are covered by the Operational Warranty, that is, not the other way around, as the Respondent claims in the present case.

234. The Warranty Period, which constitutes the time scope of the Warranties, is defined under that heading in Clause 1.1 of the Contract and "*with regard to the Project, means the period that commences on the Provisional Acceptance Date of the Power Plant [March 26, 2019] and ends on either: (i) the first anniversary of the Provisional Acceptance Date [March 26, 2020] for the Plant; or (ii) the date determined in accordance with Clause 20.4, whichever occurs first.*"
235. Since the first date to occur could have been the first anniversary of the Provisional Acceptance Date - according to which the respective Warranty Period would have ended on March 26, 2020 - it remains to be determined whether under the assumption of such clause 20.4 the Warranty Period was *automatically extended* prior to the first anniversary of the Provisional Acceptance Date.
236. The possibility that the Warranty Period may be deemed to have ended on the *date determined in accordance with Clause 20.4* ("Extension of the Warranty Period"), is subject to its own issues, as can be seen from the positions of both Parties.
237. In effect, by virtue of the terms of said Clause 20.4 "*If the Power Plant cannot generate electric energy due to a Defect or Flaw, the applicable Warranty Period will be automatically extended¹³⁸ for a period equal to the time during which the Power Plant, or the corresponding part thereof, cannot be used by the Commission*".
238. From the terms of this part of Clause 20.4, two premises can be inferred as presuppositions for the *automatic* extension of the Warranty Period to operate; the first being that the Power Plant *is unable to generate electric power*; and the second, that such *inability to generate electric power* has been caused by a Defect or a Flaw. As regards the first premise, the Arbitral Tribunal has not noted the existence of specific claims regarding any *inability of the Power Plant to generate electricity*.
239. Likewise, considering that according to Clause 20.4 of the Contract, if the Minor Defects that were identified and recorded in the Acceptance Certificate "*do not adversely affect the safety, reliability and operation of the Plant, they need not be corrected as a condition for the issuance of the Provisional Acceptance*

¹³⁸ Emphasis added by the Arbitral Tribunal.

Certificate (and this certificate was issued on March 26, 2019), it may be inferred that the Minor Defects specified in the PAC did not cause the *Power Plant to be unable to generate electric power due to a Defect or Flaw* (as both terms are defined in Clause 1.1 of the Contract), in addition to the fact that the Arbitral Tribunal did not find that the Respondent has manifested and accredited the existence of any impact of that nature.

240. Consequently, notwithstanding that the same Clause 20.4 stipulates that "*Furthermore, the proper functioning of the Major Equipment or Materials to be repaired or replaced during the Warranty Period, as well as the absence of Defects or Flaws, shall be guaranteed by the Contractor for a term of 1 (one) year from the date of the repair or replacement in question when it is free of Defects and/or Flaws*", the Arbitral Tribunal considers that this latter Warranty of one year is not covered by the Banorte Letter of Credit, since its "Termination Date" has elapsed, and neither is it covered by the HSBC Letter of Credit, by reason of the subject matter, since the latter only supports the Performance Warranty established in accordance with Clauses 11.1.a) and 20.2 of the Contract.
241. In addition to the expiration of the Warranty Period as determined above, the Arbitral Tribunal did not verify the admissibility of the Respondent's assertion that, in accordance with the last part of the aforementioned Clause 20.4, the Commission has exercised *the right to request from the Contractor, and the Contractor has the obligation to deliver, a letter of credit in a reasonable and sufficient amount to ensure compliance with the warranty covering proper performance and absence of Defects and Flaws in the Major Equipment or Materials to be repaired or replaced during the Warranty Period*".
242. Likewise, even though Respondent emphatically claims that it has exercised that right and has requested that Empalme extend the *Banorte Letter of Credit* for one year, solely for the 247 outstanding Warranty Claims or to deliver another letter of credit to cover them, the reality is that CFE does not provide any information in its memorial regarding the document with which it could prove this claim; and in any case, the relevant issue is that, as previously stated, the HSBC Letter of Credit, which was enforced by the Respondent, does not guarantee the obligations referred to in Clause 20.4 of the Contract.
243. In fact, from the latter contractual provision it is undoubtedly clear, as the Respondent, in fact, acknowledges, that the *operational warranty* referred to by the Respondent was no longer covered by the Banorte Letter of Credit and was never covered by the HSBC Letter of Credit; and such warranty, in order to be covered, would have required the issuance of a separate letter of credit.

244. Finally, what is an irrefutable fact because it is expressly stated,¹³⁹ besides being a determining factor for purposes of the dispute, is that the Respondent enforced the HSBC Letter of Credit without such enforcement being appropriate due to the foregoing considerations and the express terms of the Contract; therefore the Tribunal has determined that the enforcement of that Letter of Credit violated the terms of the Contract and therefore, the amount for which it was improperly enforced, that is the amount of USD \$13,627,892.00¹⁴⁰ (thirteen million, six hundred twenty-seven thousand, eight hundred ninety-two US dollars and 00/100), currency of the United States of America, must be returned or reimbursed to Empalme.
245. The aforementioned contractual violation is particularly serious, taking into account the fact that the Respondent's actions were clearly deliberate, since it was fully aware of the scope of the Performance Warranty under the Contract, as well as the specific purpose of the HSBC Letter of Credit, in addition to being aware that, since this instrument is a standby letter of credit subject to ISP98,¹⁴¹ due to the nature of this instrument, the issuing bank would proceed without further ado to pay the amount of the demand for payment made by CFE, without questioning the origin of the claim.
246. Within this context, by virtue of the blatant inadmissibility of the enforcement of the HSBC Letter of Credit, as well as the circumstances referred to in the preceding paragraph, the Arbitral Tribunal could have considered, *prima facie*, that the total amount for which the Respondent enforced the HSBC Letter of Credit, that is, the amount of "USD \$13,627,892.00"¹⁴² (thirteen million, six hundred twenty-seven thousand, eight hundred ninety-two dollars and 00/100) currency of the United States of America, constituted an excess on the part of the Respondent.
247. However, the Arbitral Tribunal also notes that Claimant expressly stated that "[a]fter an exhaustive analysis of the Minor Defects and Warranty Claims, GPS Expert Report I concludes that Empalme would only be liable for 58 Minor Defects and 6 Warranty Claims, which were previously identified and explained in detail ... [and] that these have a collective value of USD \$1,040,512.56". Likewise, after questioning Respondent's conduct in the enforcement of the HSBC Letter of Credit, Empalme expressly stated that "[t]he amount of USD \$1,040,512.56, should be applied to the HSBC Letter of Credit and, therefore, it should

¹³⁹ CFE Official Communication No. 7B/2020/RJMN-00140, Exhibit A-022 to the Statement of Claim and Exhibit D-040 to the Statement of Defense. In this document, it cites document No. DCIPI/CFFE/062/2020, by means of which CFE "requested the collection of said Guarantee in the amount of USD \$13,627,892.00 (Thirteen million, six hundred twenty-seven thousand, eight hundred ninety two dollars)", which was not produced by either Party.

¹⁴⁰ Figure in which both Parties agree as to the amount for which the HSBC Letter of Credit was enforced.

¹⁴¹ International usages relating to ISP98 contingent claims.

¹⁴² Amount of the "Enforced Amount" of the HSBC Letter of Credit, Exhibits A-010 and A-011 of the Statement of Claim.

*be considered that the enforcement of the guarantee in question was only appropriate for the amount of USD \$12,638,574.89 (sic)", adding that "....CFE is obliged to settle in favor of EMPALME the amount of USD \$12,638,574.89, the amount resulting from subtracting the total amount of Minor Defects and Warranty Claims for which EMPALME is effectively liable from the total enforced amount of the HSBC Letter of Credit enforced, and adding the respective commissions that were also charged to EMPALME."*¹⁴³

248. Closely related to the foregoing are the associated costs incurred by the Claimant in connection with the Respondent's enforcement of the HSBC Letter of Credit, which the Claimant states amount to USD \$51,195.45, corresponding to USD \$37,762.14 (for the commission that was paid to the issuing financial institution), and USD \$13,433.31 (corresponding to the respective SWIFT expenses incurred),¹⁴⁴ amounts that were confirmed by expert witness GPS in its Expert Report.¹⁴⁵ Since the enforcement of the HSBC Letter of Credit was improper, the Tribunal finds that the Respondent should reimburse the Claimant for those amounts.
249. There are other amounts that the Claimant has claimed derived from the enforcement of the HSBC Letter of Credit, including translations of expert reports, and the costs of bonds from related companies.¹⁴⁶ Regarding the former (totaling \$215,074.65 pesos M.N.), the Tribunal considers that they should be justified, in any case, as arbitration costs, while regarding the latter (for a total of USD \$1,692,506.43 dollars), the Tribunal rejects them since this is an indirect financial cost for participating in the Contract with the financial backing of related companies.¹⁴⁷
250. Since the above issues, specifically related to the enforcement of the HSBC Letter of Credit, are independent of the issues under discussion by the Parties with regard to the various Minor Defects and Warranty Claims, as well as the origin, resolution and performance thereof, and the resulting effects for the Parties, the Arbitral Tribunal does not rule at this time with regard to these issues, the analysis of which is set forth below.

¹⁴³ Statement of Claim, ¶¶ 980 to 983.

¹⁴⁴ Statement of Claim, ¶ 984.

¹⁴⁵ See GPS Expert Report I, ¶¶ 43 and 406.

¹⁴⁶ Empalme's Closing Memorial, ¶ 122, e) (*Other costs incurred due to improper enforcement of the HSBC Letter of Credit, the Emergency Arbitration and the Arbitration*).

¹⁴⁷ The costs submitted for the Tribunal's consideration include performance bonds from OHL Industrial, S.L. and Sener, Ingeniería y Sistemas, S.A., and accrued but unpaid interest. See, Empalme's Closing Memorial, ¶ 122, e) ii).

Resolution of Minor Defects

Background Information

251. Clause 1.1 of the Contract (Definitions) when referring to Minor Defects (or "MDs") provides that this concept "... *shall have the meaning indicated in Clause 18.4 of the Contract*", which defines them as those that "... *do not adversely affect the safety, Reliability and operation of the Power Plant...*", and those that are not necessary to correct as a condition for the issuance of the Provisional Acceptance Certificate..."; however, the Minor Defects must be corrected or completed to comply with the Contract Specifications within 60 days following the issuance of the Provisional Acceptance Certificate.
252. Likewise, according to the terms of that clause, in the event that Empalme unjustifiably delays in making the corrections, CFE "... *may make them by itself or through a third party and the cost will be covered either by [Empalme] or by enforcing the Performance Bond and/or the Operational Bond.*"
253. The Provisional Acceptance of the Power Plant is provided for in Clause 18.1 of the Contract, which also establishes the terms and conditions for the issuance of the Provisional Acceptance Certificate of the Power Plant. This acceptance was postponed on several occasions due to the impossibility of completing the Performance Tests referred to in Clause 17.3 of the Contract - for reasons beyond the Contractor's control - as acknowledged by CFE in the Fifth Amendment Agreement.¹⁴⁸
254. In accordance with Clause 18.1 of the Contract and Clauses Three and Four of the Fifth Amendment Agreement, the Provisional Acceptance Certificate was issued on March 26, 2019, and on the same date the Provisional Acceptance Report was formalized and was signed by both parties,¹⁴⁹ to which a list of Minor Defects was attached as Exhibit 9, in which 586 Minor Defects are listed, grouped under three main headings, which are (i) Engineering, (ii) Construction and (iii) Commissioning or Startup.¹⁵⁰ As of that date, taking the Provisional Acceptance Report mentioned above as a starting point, the 586 Minor Defects listed in Exhibit 9 of the Record should obviously be considered to be "pending" or "open".

¹⁴⁸ Fifth Amendment Agreement, Exhibit A-008 attached to the Statement of Claim.

¹⁴⁹ Exhibits A-009 attached to the Statement of Claim and A-109 attached to Empalme's Pre-Hearing Brief, respectively.

¹⁵⁰ Exhibit 30 to the Cámara Anzures Expert Report, submitted by the Respondent as Exhibit DP-001 to its Statement of Defense.

Empalme's Position

255. The Claimant provides a detailed analysis of the Minor Defects based on Expert Report I and its respective exhibits, specifically Appendix 8 thereof (Analysis of Minor Defects).
256. In GPS Expert Report I, the expert indicates that at the time his report was prepared there were still Minor Defects pending closure and resolution, which are shown as of January 14, 2021 on Table 9 reproduced below, which includes a summary of the MDs and their status, according to the information available and the analysis conducted by GPS.¹⁵¹

Table 9. Status of Minor Defects as of January 14, 2021

RESPONSIBLE PARTY	Closed	Canceled	Repeated	Disputed	In progress	Request for Closure sent	Open	Grand total	%
ENGINEERING	63		1	3	5	7		79	13.48%
CONSTRUCTION	240			5	2	1	1	249	42.49%
STARTUP	138	2	8	65	31	3	1	248	42.32%
STARTUP & CONSTRUCTION	2			2	1			5	0.85%
SIEMENS						5		5	0.85%
GRAND TOTAL	443	2	9	75	39	16	2	586	100.00%
%	75.6 %	0.3 %	1.5 %	12.8 %	6.7 %	2.7 %	0.3 %	100.0 %	

257. According to the expert's explanation, the meaning of each field in the columns of the above table is provided below:

Closed:	MD Closed by Official Correspondence.
Canceled:	MD Canceled from the signature of the Provisional Acceptance Certificate (PAC).
Repeated:	Repeated MDs that should not be counted.
Disputed:	MD without agreement between the Parties.

¹⁵¹ GPS Expert Report I, ¶¶ 217 and 218, Exhibit AP-001 to the Statement of Claim.

In progress:	MD in the process of being resolved by Empalme with Assigned Labor.
Closure request sent:	Closure request submitted by Empalme, Pending response from CFE.
Open:	MD with no assigned resources due to lack of definition with CFE.

258. For purposes of its own arguments and the analysis by the Arbitral Tribunal, the Claimant identifies each of the Minor Defects with the prefix "MD" and the consecutive number with which they are listed in the aforementioned Report and classifies them under the following five (5) headings: (i) Open; (ii) Disputed; (iii) Repeated; (iv) Closed; and (v) Resolved through the HSBC Letter of Credit.¹⁵² The Claimant provides showing the status of each of these MDs as of January 14, 2021, according to the conclusions contained in GPS Expert Report I.

259. According to the Claimant's classification, a summary of its positions with regard to the MDs listed in the aforementioned Provisional Acceptance Report is provided below, omitting the reference to the status of each MD on which the Claimant bases its arguments,¹⁵³ since the status underwent modifications during the case investigation phase, and there were also contradictory positions between the Parties, as can be seen in their respective memorials, which are referred to below.

260. Open Minor Defects.

With Request for Closure¹⁵⁴

MD 8, MD 24, MD 25, MD 26, MD 37, MD 38, MD 72, MD 146, MD 327, MD 328, MD 446, Siemens MD 1, Siemens MD 2, Siemens MD 3, Siemens MD 4 and Siemens MD 5.

261. The Claimant argues that *most of these MDs are considered to be closed by GPS and those that are considered to be open require a response from CFE and therefore cannot be chargeable to Empalme.*

In the Process of being Resolved with Assigned Labor or in the Review process for Response¹⁵⁵

¹⁵² Statement of Claim, 229 and 230, Exhibit AP-001 and Appendix 8 attached thereto.

¹⁵³ Statement of Claim, ¶¶ 231 to 656.

¹⁵⁴ Statement of Claim, ¶¶ 231 to 281.

¹⁵⁵ Statement of Claim, ¶¶ 282 to 399.

MD 41, MD 42, MD 43, MD 44, MD 46, MD 295, MD 321, MD 325, MD 329, MD 338, MD 360, MD 364, MD 368, MD 385, MD 390, MD 399, MD 416, MD 433, MD 438, MD 445, MD 450, MD 457, MD 474, MD 477, MD 482, MD 487, MD 494, MD 502, MD 512, MD 517, MD 532, MD 535, MD 539, MD 547, MD 554, MD 558, MD 559, MD 560 and MD 571.

262. Regarding this item, the Claimant argues that *the delay in responding to MDs that GPS considers to be open is justified because of issues not attributable to Empalme, such as MDs that were resolved and sent for closure, MDs for which no response has been received from CFE to the work permit request required for resolution, and Empalme's inability to pay suppliers for their work due to lack of payment by CFE.*

No Request for Closure¹⁵⁶

MD 322 and MD 371.

263. In the case of these two MDs, the Claimant argues that, *even though CFE categorizes them as Open, their resolution requires a Plant Shutdown and CFE has not responded to Empalme's requests to that effect.*

264. Disputed Minor Defects¹⁵⁷

MD 35, MD 45, MD 49, MD 181, MD 192, MD 203, MD 204, MD 212, MD 324, MD 331*, MD 341, MD 349, MD 351, MD 352, MD 353, MD 356, MD 358, MD 365, MD 375, MD 377, MD 387, MD 391, MD 392, MD 429, MD 431, MD 432, MD 434, MD 436, MD 437, MD 440, MD 442, MD 444, MD 448, MD 453, MD 454, MD 455, MD 456, MD 458, MD 459, MD 460, MD 462, MD 463, MD 464, MD 465, MD 466, MD 467, MD 468, MD 469, MD 472, MD 475, MD 476, MD 484, MD 485, MD 489, MD 490, MD 493, MD 507, MD 509, MD 513, MD 514, MD 514, MD 515, MD 541, MD 542, MD 550, MD 551, MD 555, MD 556, MD 557, MD 561, MD 562, MD 563, MD 564, MD 570, MD 572 and MD 575.

* This MD, due to its relevance, will be the subject of a special analysis.

265. Again, the Claimant argues that *the delay in resolving those MDs that GPS considers to be open is justified because they are issues not attributable to Empalme, and this group of defects involves MDs that were resolved and sent for closure, the nonexistence of technical elements that justify their performance, and Empalme's inability to pay suppliers for their*

¹⁵⁶ Statement of Claim, ¶¶ 400 to 404.

¹⁵⁷ Statement of Claim, ¶¶ 405 to 631.

*work due to lack of payment by CFE.*¹⁵⁸

266. Repeated Minor Defects¹⁵⁹

MDs 51 and 502; MDs 330, 343 and 358; MDs 333 and 353; MDs 342 and 512; MDs 329 and 345; MDs 27 and 406; MDs 21 and 473; and MDs 54 and 492.

267. According to the Claimant's representations in each case, MDs 51, 330 and 343, 333, 342, 345, 406, 473 and 492 should be considered to have been Closed; and each of MDs 202, 358, 353, 512, 329, 27, 21 and 54 should continue to be considered to be a Minor Defect.

268. Minor Defects that have been Closed and Canceled¹⁶⁰

MDs 1 to 7; MDs 9 to 23; MDs 27 to 34; MDs 36, 39 and 40; MDs 47 and 48; MD 50; MDs 52 to 71; MDs 73 to 145; MDs 147 to 180; MDs 182 to 191; MDs 193 to 202; MDs 205 to 211; MDs 213 to 294; MDs 296 to 320; MDs 323 and 326; MDs, 332; 334 and 335; MDs 339 and 340; MD 344; MDs 346 to 348; MDs 350, 354, 355, 357 and 359; MDs 361 to 363; MDs 366, 367, 369 and 370; MDs 372 to 374; MD 376; MDs 378 to 384; MDs 386, 388 and 389; MDs 400 to 405; MDs 407 to 428; MDs 430, 435, 439, 441, 443, 447 and 449; MDs 451 and 452; MD 461; MDs 470 and 471; MDs 478 to 481; MDs 495 to 501; MDs 503 to 506; MDs 508, 510, 511 and 516; MDs 518 to 531; MDs 533, 534, 536, 537, 538 and 540; MDs 543 to 546; MDs 548, 549, 552 and 553; MDs 565 to 569; MDs 573 and 574; MDs 576 to 580; and, 1 Other.*

* "Additionally, there are two MDs that were cancelled as of the date of Provisional Acceptance since they were found to have been resolved. These MDs are the ones numbered 336 and 337".

269. The Claimant contends that the previous MDs *were resolved by Empalme and CFE expressed its conformity with the work performed, consequently they are not subject to analysis as to the scope of the work performed.* The Claimant provides a list in which it indicates the number and date of the official communication that, according to the Claimant, provides evidence of the closure of each of those MDs.¹⁶¹

¹⁵⁸ Statement of Claim, ¶ 631.

¹⁵⁹ Statement of Claim, ¶¶ 632 to 648.

¹⁶⁰ Statement of Claim, ¶¶ 649 and 650.

¹⁶¹ Statement of Claim, ¶ 649.

270. Minor Defects resolved under the HSBC Letter of Credit¹⁶²

MDs 119, 146, 181, 192, 203, 204, 208 and 212; MDs 294 and 295; MDs 322, 342, 330, 331, 341, 342, 343 and 349; MDs 351 to 353; MDs 356, 358, 368, 371, 375, 377, 385, 387, 392 and 399; MDs 429, 431 to 434, 436, 437, 438, 442, 444, 446, 448 and 450; MDs 453 to 460; MDs 462 to 469; MDs 474 to 476; MDs 482 to 485; MDs 487, 489, 490, 492, 493 and 494; MDs 507, 509, 512 to 515, 517, 535, 541, 542, 547, 550 and 551; MDs 554 to 564; MDs 570, 571, 572 and 575; and Siemens 01, 04 and 05.

271. In connection with this concept, Empalme submits a table in which, according to the Claimant, it lists the *MDs that CFE claimed had been resolved under the HSBC Letter of Credit, in accordance with its official letter sent on April 2, 2020*. The Claimant also adds that, *although CFE never had the right to enforce the HSBC Letter of Credit, much less did it have the right to resolve 103 MDs of which 71 had already been resolved, according to GPS Expert Report I*.¹⁶³

272. The Claimant submits a table containing a descriptive valuation of 46 Open Minor Defects according to the conclusions of GPS¹⁶⁴ which are described and shown in Appendix 11 of GPS Expert Report I, totaling \$4,562,434.60 Mexican Pesos and USD \$836,543.65 dollars and are identified below, without including the table in question.

MD 8, MDs 42 and 43, MDs 45 and 46, MD 49, MD 146, MD 204, MDs 321 and 322, MDs 324 and 325, MD 338, MDs 352 and 353, MD 358, MD 360, MD 364, MD 371, MD 390, MD 399, MD 416, MD 434, MDs 436 and 437, MD 448, MD 453, MD 455, MD 457, MD 466, MD 467, MDs 474 and 475, MD 477, MD 487, MD 494, MD 502, MD 512, MD 517, MD 532, MD 535, MD 554, MD 556, MDs 558 and 559.

273. The Claimant also submits a table showing certain Minor Defects that *GPS determined to be Open and for which Empalme is responsible, but [it claims] should not incur any cost for their resolution*, for the reasons stated in the table, which is inserted below for purposes of considering the Claimant's argument.¹⁶⁵

¹⁶² Statement of Claim, ¶¶ 651 and 652.

¹⁶³ Statement of Claim, ¶¶ 650 to 652 and official correspondence number 7B/2020/RJMN-00140, Exhibit A-022 attached to the Statement of Claim.

¹⁶⁴ Statement of Claim, ¶ 653 and GPS Expert Report I, Exhibit AP-001 attached to the Statement of Claim.

¹⁶⁵ Statement of Claim, ¶ 654 and GPS Expert Report I, Exhibit AP-001 attached to the Statement of Claim.

MD Number	Description	GPS Reasoning
41	<i>"In the failure of the TG servers, it was detected that the TG control systems are not operated from the DCS, this will be verified "The integration to the DCS of the control system of the turbo-gas units and Steam Turbine, in such a way that the operation and supervision is done through the DCS operating stations, however the control of the load of the units from the DCS is available."</i>	The costs are included in the value of MD 457.
445	<i>"Conclude the revision of DCS screens (graphics) and descriptions in Spanish, as well as TV screens, TGs and package equipment in the DCS Distributed Control System. "</i>	The costs of the TV are included in MD 466, while the costs of the TGs are included in MD 457, therefore this MD implies no cost of any type.
458	<i>"You are requested to deliver evidence of response to official communication CSPPS/CCEI-322/2018, load derating incident and tripping of units TG1 and TG2."</i>	No cost is implied since there was no effect on the electrical equipment. There is no specific document provided by Siemens on these tests performed. Siemens indicates that there have been no signs of subsequent damage.
560	<i>"GVRC1 AND GVRC2 CONTINUOUS AIR EMISSIONS MONITORING SYSTEM": The delivery of the final revision of the PIA LABORATORY REPORT is requested, as well as verification of the data acquisition system for the last two months of operation of the Plant."</i>	The last letter with the comments addressed in the body of the reports was not answered by CFE. No cost is implied since it only involves the delivery of a report.
571	<i>"The delivery of the test protocol records for the TG control systems (TG1 and TG2) is requested. "</i>	There is no cost because it only involves the delivery of records.

274. The Claimant also submits a table, which is inserted below,¹⁶⁶ showing 8 Minor Defects for which Empalme claims CFE owes it various amounts for (i) amount deducted from the Price

¹⁶⁶ Statement of Claim, ¶ 655 and GPS Expert Report I, Exhibit AP-001 to the Statement of Claim, ¶ 655.

of the Contract in the Provisional Acceptance; (ii) MDs resolved and completed in the HSBC Letter of Credit; and (iii) additional and unforeseen work performed with respect to those MDs.

MD Number	Description	Valuation	
		MXN	USD
26	"Install a booth for the cathodic protection rectifiers located in the intake works. 7.3.4.10.5 cathodic protection technical characteristics."	\$128,000.00	-
35	"In the gas heater and gas filter, the transmitters are mounted without cabinets, in the gas heater package. They must be installed in NEMA 4X cabinets."	\$37,397.36	-
38	"Correction is required of the hot well conductivity meter installation that operates under the operating conditions corresponding to the process."	\$31,104.00	-
375	"Verification is required of the operation of the Island mode of the TGs in Combined Cycle mode operating a Plant electrical protection."	-	\$10,609.79
489	"Verify the dynamic response performance of 1%, 3% AND 5% of the GVRCS."	-	\$9,298.47
490	"Perform final tuning of the medium pressure bypass control loop."	-	\$21,219.57
514	"Verify and check that the TV HMI displays eccentricity values of the different rotors and verify the graphic scale and alarm values of the eccentricity of the three rotors (HIGH, MEDIUM AND LOW) 10MAD10CY901, 10MAD20CY901, 10MAD30CY902, 10MAD40CY901."	-	\$15,600.00
542	"We request verification and assurance that there are no further vibrations in the MP and BP bypass valves".	\$50,024.00	-
Total:		\$246,525.36	USD \$56,727.83

275. With regard to the two preceding tables [with a cutoff date of January 14, 2021¹⁶⁷ the Claimant argues that *by subtracting the amounts owed by CFE to Empalme for the resolution*

¹⁶⁷ GPS Expert Report I, ¶¶ 217, Exhibit AP-001 to the Statement of Claim.

*of Minor Defects, from the estimated amount for the completion of the Minor Defects considered by GPS to be Open by GPS, the result is the one shown on the following table.*¹⁶⁸

	MXN	USD
Estimated amount for resolution of open MDs	\$4,562,434.60	\$836,543.65
Amount owed by CFE	\$246,525.36	\$56,727.83
Total	\$4,315,909.24	\$779,815.82

276. Subsequently, in light of the Statement of Defense, CFE contests the position of Empalme with regard to each of the Minor Defects¹⁶⁹ and in light of the Cámara Anzures Expert Report¹⁷⁰ prepared by the Respondent's expert, which according to CFE confirms all its statements with regard to the disputed MDs - the Claimant states in Empalme's Pre-Hearing Brief¹⁷¹ that *"the signature of Provisional Acceptance does not deprive it of the possibility of analyzing and evaluating each of the MDs in detail in order to determine whether they should be resolved."*¹⁷²
277. Empalme states that for purposes of summarizing the arguments related to each MD, it groups them into the following categories, and the status of all MDs can be consulted in Exhibit A-100¹⁷³ which should be considered to have been updated as of November 25, 2021, which is the date of the GPS MD Technical Analysis, Appendix No. 01 of GPS Expert Report II,¹⁷⁴ on which the Claimant relies to support its claims.

A.1. Subsequent closure.

A.2. Minor Defects related to testing.

A.3. Minor Defects related to each other for closure (repeated).

A.4. Open Minor Defects.

A.5. Other Disputed Minor Defects and alleged by CFE to be Open by CFE, and MD-331*.

¹⁶⁸ Statement of Claim, ¶ 656 and GPS Expert Report I, Exhibit AP-001 to the Statement of Claim.

¹⁶⁹ Statement of Defense, ¶¶ 213 to 937.

¹⁷⁰ Cámara Anzures Expert Report, Exhibit DP-001 to the Statement of Defense.

¹⁷¹ Empalme's Pre-Hearing Brief, ¶ 91.

¹⁷² Statement of Defense, ¶ 938.

¹⁷³ Empalme's Pre-Hearing Brief, ¶¶ 92 to 114 and Exhibit A-100 to that Pre-Hearing Brief.

¹⁷⁴ GPS Expert Report II, Exhibit AP-002 to Empalme's Pre-Hearing Brief, and Appendix No. 01 to that Expert Report.

* Due to its relevance, this MD will be the subject of a special analysis.

278. Subsequent Closure. The Claimant states that this category includes MDs that were resolved by Empalme and were formally closed by CFE after the Statement of Claim and Statement of Defense were filed, referring to Exhibit A-100 for identification. Likewise, the Claimant notes that Empalme has continued to resolve MDs and these have not been rejected by CFE for alleged unjustified delays.¹⁷⁵ In Exhibit A-100, the MDs listed with the status of "closed by CFE" or "subsequent closure" according to CFE are listed below:

MD-43, MD-119, MD-208, MD-294, MD-295, MD-322. MD-324, MD-333, MDs 341 and 342, MD-356, MD-360, MD-385, MD-429, MD-432, MD-434, MD- 442, MD-446, MD-454, MDs 458 and 459, MDs 463, 464 and 465, MDs 467, 468 and 469, MD-477, MD-482, MD-493, MD-507, MD-509, MD-512, MD-514, MD-539, MD-550, MD-551, MD-557, MD-560, MD-564, MD-570, MD-572, MD-575, and Siemens MDs 3, 4 and 5.

279. Minor Defects related to testing. The Claimant states that there are certain MDs related to Pending Tests and as stated in section V of Empalme's Pre-Hearing Brief, such Tests should be considered to have been satisfactorily performed under the Fifth Amendment Agreement, and therefore the MDs related thereto should be considered to have been closed.¹⁷⁶
280. Likewise, the Claimant's expert states in its opinion¹⁷⁷ that "*.... GPS can conclude that after reviewing the arguments presented by the CFE expert, the time elapsed between the expiration of the Operational Warranty [that is, July 2, 2019, as determined by the Arbitral Tribunal and not June 9, 2019, as Empalme claims] and the resumption of the tests, is attributable to CFE and consequently, since the term provided in the Fifth Amendment Agreement has expired, the tests that have not been performed cannot be claimed as breach of the Contract by EMPALME, taking into account that said Agreement establishes that once the term has expired, any missing tests would be considered to have been satisfactorily completed*".
281. Minor Defects related to each other for closure (repeated). With regard to this category, the Claimant states its opposition to the performance duplicate work, and requests that any MDs that have been included in other MDs or WCs be considered to have been closed.¹⁷⁸

¹⁷⁵ Empalme's Pre-Hearing Brief, ¶ 93.

¹⁷⁶ Empalme's Pre-Hearing Brief, ¶ 94.

¹⁷⁷ GPS Expert Report II, Exhibit AP-002 to Empalme's Pre-Hearing Brief, ¶ 47.

¹⁷⁸ Empalme's Pre-Hearing Brief, ¶¶ 95 and 96.

282. Considering the Repeated Minor Defects originally claimed by the Claimant in its Statement of Claim¹⁷⁹ as compared to what is claimed by the Respondent in its Statement of Defense¹⁸⁰ with the support of its expert,¹⁸¹ as well as the conclusions of the Claimant's expert,¹⁸² it can be concluded that the status of the MDs claimed as Repeated as of November 29, 2021 -the date of the Parties' Pre-Hearing Briefs- is as follows:

According to CFE

Should be categorized as Closed: MD 202, MD 343, MD 342, MD 512, MD 406, MD 21, MD 473 and MD 54.

Should be categorized as Open: MD 51, MD 358, MD 333, MD 353, MD 329, MD 345, MD 27 and MD 492.

According to CFE's expert

Should be categorized as Closed: MD 502, MD 330, MD 343, MD 358, MD 342, MD 512, MD 27, MD 406 and MD 54.

Should be categorized as Open: MD 51, MD 333, MD 353, MD 329, MD 345 and MD 492.

According to Empalme's expert

Should be categorized as Closed: MD 51, MD 202, MD 330, MD 333, MD 342, MD 343, MD 358 and MD 492.

Should be categorized as Open: MD 345 and MD 512.

283. Open Minor Defects. Regarding this category of Minor Defects, the Claimant states that those that are considered to be the responsibility of Empalme and should be categorized as Open are the ones indicated in the Technical Analysis contained in Appendix 01 of GPS Expert Report II and Empalme has made its best efforts to resolve them, for which it requested that CFE notify it four weeks prior to the date on which it considered that the necessary conditions for resolution had been met.¹⁸³

¹⁷⁹ Statement of Claim, ¶¶ 632 to 648.

¹⁸⁰ Statement of Defense, ¶¶ 879 to 921.

¹⁸¹ Cámara Anzures Expert Report, Exhibit DP-001 attached to the Statement of Defense.

¹⁸² GPS Expert Report II, Exhibit AP-002 attached to Empalme's Pre-Hearing Brief, and Appendix No. 01 of that Report.

¹⁸³ Empalme's Pre-Hearing Brief, ¶¶ 97 and 98 and Appendix 1 to GPS Expert Report II, Exhibit AP-002 to that Brief.

284. The Claimant adds that *"... in view of the fact that CFE had indicated that the Power Plant would be out of service.... Empalme indicated [to CFE] that in order to resolve MDs with the Plant out of service -the resolution of which depended on payment to suppliers- it was necessary for CFE to confirm with sufficient advance notice in order to avoid possible interference with other contractors and subcontractors."* According to Empalme, this was intended to emphasize *"...the need to have the resources to mobilize the different suppliers... in an effort to close as many MDs as possible and in an exercise of good faith, it offered through emails in March 2020 to pay for the completion of the pending MDs so that CFE could resolve them without the need to notify Empalme in advance of the plant shutdown."*¹⁸⁴
285. The Claimant states that the Minor Defects that according to the technical analysis performed by its expert in Appendix 01 of GPS Expert Report II are the responsibility of Empalme and should be categorized as Open, are valued in section 10.1.1 of that Report and are shown in Table 10 (Summary of the Estimate of Open MDs), which shows, with the respective comments for each MD, that the calculation made by GPS for the open and discounted Minor Defects is USD 881,584.94 dollars, which Empalme must pay to CFE.¹⁸⁵
286. To arrive at the above figure, the expert analyzed the cost estimate of the Minor Defects, as mentioned in the initial GPS Expert Report¹⁸⁶ (in which a value of USD 983,271.66 was originally estimated), subtracting the value of the MDs resolved by Empalme in which GPS considered that Empalme had liability for closure, and also discounted the cost assigned by CFE to the MDs that had already been discounted by CFE in the agreements established and discounted for the Provisional Acceptance of the Plant.¹⁸⁷
287. Other Disputed Minor Defects alleged as Open by CFE. The Claimant limits itself to stating that *"... it considers that some of the MDs are still Open and although the technical analysis of those MDs can be found in Appendix 01 of GPS Expert Report II. [section A.5. corresponding to this category] MD-331 will be addressed specifically due to its special relevance."*¹⁸⁸ For the same reason, the Arbitral Tribunal analyzes MD-331 in a special chapter below.
288. As a general conclusion, applicable to the Minor Defects, it is important to refer to the Claimant's final statements, in which Empalme maintains that *"... it has continuously complied with its obligations with regard to the resolution of MDs ... which demonstrates the*

¹⁸⁴ Empalme's Pre-Hearing Brief, ¶¶ 99 to 101, and Exhibit A-099 attached thereto.

¹⁸⁵ GPS Expert Report II, ¶¶ 232 to 234 and Table 10 contained therein, Exhibit AP-002 to Empalme's Pre-Hearing Brief.

¹⁸⁶ GPS Expert Report I, ¶¶ 407 to 412 and Table 19 contained therein, Exhibit AP-001 to the Statement of Claim.

¹⁸⁷ GPS Expert Report II, ¶ 232, Exhibit AP-002 to Empalme's Pre-Hearing Brief.

¹⁸⁸ Empalme's Pre-Hearing Brief, ¶ 102.

*good faith with which it has conducted itself before CFE.... [and] ... reiterates the manner in which it categorized the MDs,"*¹⁸⁹ referring to the Table showing the *status* of the MDs, which it presented with its Pre-Hearing Brief¹⁹⁰.

289. From all of the above, Empalme concludes, basing its assertions on the GPS expert analysis, that *of the 586 MDs presented by CFE, only 78 are disputed.*¹⁹¹

CFE's Position

290. The Respondent responded to the Claimant's initial assertion, stating that *as of June 9 [2021], that is, almost four months after the Statement of Claim was filed, there were a total of 62 MDs that remained unresolved by the Claimant, and that it would provide a detailed explanation of the history of the resolution of the MDs that the Contractor has not completed in accordance with Clause 18.4 of the Contract.* The Respondent comments on such Minor Defects, expressly responding to the Claimant's representations in that regard.¹⁹²
291. Open Minor Defects with Request for Closure. The Respondent comments in detail on 16 Minor Defects included under this heading, as well as the status of each of them, which is shown on the following table.¹⁹³ Furthermore, in support of its assertions, the Respondent submitted Exhibits D-42 to D-71.

MD Status Summary Table

MDs	GPS Conclusion	CFE Status	CFE Comments
8	Open	Closed	Resolved by the Contractor
24	Closed	Open	Pending resolution by the Contractor
25	Closed	Open	Pending resolution by the Contractor
26	Closed	Open	Pending resolution by the Contractor
37	Closed	Open	Pending resolution by the Contractor
38	Closed	Open	Pending resolution by the Contractor
72	Closed	Open	Pending resolution by the Contractor
146	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
327	Closed	Closed	Resolved by the Contractor
328	Closed	Closed	Resolved by the Contractor
446	Closed	Closed	Resolved using resources from the Letter of Credit

¹⁸⁹ Empalme's Closing Memorial, ¶¶ 19 to 22.

¹⁹⁰ Exhibit A-100 to Empalme's Pre-Hearing Brief.

¹⁹¹ Empalme's Closing Memorial, ¶ 23; MD Status Table, Exhibit A-100; GPS Expert Report I and Appendices 08 and 11; GPS Expert Report II and Appendix 01.

¹⁹² Statement of Defense, ¶¶ 208 and 209.

¹⁹³ Statement of Defense, ¶¶ 213 to 278 and Exhibits D-42 to D-71.

MDs	GPS Conclusion	CFE Status	CFE Comments
Siemens 1	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
Siemens 2	Closed	Closed	Resolved by the Contractor
Siemens 3	Closed	Open	Pending resolution by the Contractor
Siemens 4	Closed	Closed	Resolved by CFE using its own resources
Siemens 5	Closed	Closed	Resolved by CFE using its own resources

292. Minor Defects In the Process of being Resolved with Assigned Labor or in the Resolution Review process. The Respondent comments in detail on 39 Minor Defects included under this heading, as well as the status of each, which is shown on the following table. In support of its assertions, Respondent submits Exhibits D-72 to D-201.¹⁹⁴

Summary Table of the Status of MDs in the Resolution Process

MDs	GPS Conclusion	CFE Status	Comments
41	Open	Open	Pending resolution by the Contractor
42	Open	Open	Pending resolution by the Contractor
43	Open	Open	Pending resolution by the Contractor
44	Closed	Open	Pending resolution by the Contractor
46	Open	Closed	Resolved by the Contractor
295	Closed	Closed	Resolved using resources from the Letter of Credit
321	Open	Open	Pending resolution by the Contractor
325	Open	Closed	Resolved by the Contractor
329	Open	Open	Pending resolution by the Contractor
338	Open	Open	Pending resolution by the Contractor
360	Open	Open	Pending resolution by the Contractor
364	Open	Closed	Resolved by the Contractor
368	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
385	Closed	Closed	Resolved by CFE using its own resources
390	Open	Closed	Resolved by the Contractor
399	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
416	Open	Open	Pending resolution by the Contractor
433	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
438	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
445	Open	Open	Pending resolution by the Contractor
450	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution

¹⁹⁴ Statement of Defense, 279 to 457 and Exhibits D-72 to D-201.

MDs	GPS Conclusion	CFE Status	Comments
457	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
474	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
477	Open	Open	Pending resolution by the Contractor
482	Closed	Closed	Resolved by CFE using its own resources
487	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
494	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
502	Open	Closed	Resolved by the Contractor
512	Open	Closed	Resolved using resources from the Letter of Credit
517	Open	Open	In the process of being resolved using resources from the Letter of Credit.
532	Open	Open	Pending resolution by the Contractor
535	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
539	Closed	Open	Pending resolution by the Contractor
547	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
554	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
558		Open	In the process of being resolved using resources from the Letter of Credit.
559	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
560	Open	Closed	Resolved using resources from the Letter of Credit
571	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution

293. Minor Defects without Request for Closure. The Respondent mentions only 2 Minor Defects included in this category, and their status is as following, according to CFE's statement, without any table being included in this case and without any exhibits being submitted.¹⁹⁵

MD-322 The Claimant states that *the status of this MD according to CFE is **Open**, which is consistent with the GPS analysis* [GPS Expert Report I].

The Respondent states that *this MD is **Closed** [because] the Contractor irresponsibly left its obligation unfulfilled without justification, therefore CFE had to offer the course that is the subject of the MD using its own simulator.*

¹⁹⁵ Statement of Defense, ¶¶ 458 to 468.

MD-371 The Claimant states that *the status of this MD according to CFE is **Open** and states that a Plant Shutdown is required for its resolution and CFE has not given notice of it, adding that GPS concludes in its analysis [GPS Expert Report I] that the MD has not been fully resolved because it requires a Plant Shutdown and should be considered to be open.*

The Respondent states that *CFE has no obligation to give notice to the Contractor regarding shutdowns the Power Plant and that it is Empalme who has the obligation to request a work permit from CFE to resolve the MD. The Respondent adds that by means of a certificate dated May 30, 2019, the Power Plant was transferred to Empalme to conduct the Tests under the Fifth Amendment Agreement [of the Contract] and to resolve the Minor Defects, and the Contractor failed to comply with its obligations.*

294. Disputed Minor Defects. The Respondent provides detailed comments in paragraphs 473 to 878 of its Statement of Defense regarding the Minor Defects included under this heading, as well as the status of each, which are summarized on the following table.¹⁹⁶ Furthermore, the Respondent provides Exhibits D-202 to D-528 in support of its assertions.

295. MD 331, which is included in this category, will be the subject of special analysis later in this Award due to its relevance.

Summary Table of the Status of Disputed MDs

MDs	GPS Conclusion	CFE Status	Comments
35		Open	Pending resolution by the Contractor
45		Open	Pending resolution by the Contractor
49		Open	Pending resolution by the Contractor
181		Open	Included in Collection of the Letter of Guarantee and pending resolution
192		Open	Included in Collection of the Letter of Guarantee and pending resolution
203	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
204	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
212	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
324	Open	Closed	Resolved using resources from the Letter of Credit
331	Closed	Open	Resolved using resources from the Letter of Credit (documentary closing process)
341	Closed	Closed	Resolved by CFE using its own resources

¹⁹⁶ Statement of Defense, 473 to 878 and Exhibits D-202 to D-528.

MDs	GPS Conclusion	CFE Status	Comments
349	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
351	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
352	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
353	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
356	Closed	Closed	Resolved using resources from the Letter of Credit
358	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
365	Closed	Open	Pending resolution by the Contractor
375	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
377	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
387	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
391	Closed	Open	Pending resolution by the Contractor
392	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
429	Closed	Closed	Resolved using resources from the Letter of Credit
431	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
432	Closed	Closed	Resolved by CFE using its own resources
434	Open	Closed	Resolved using resources from the Letter of Credit
436	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
437	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
440	Closed	Open	Pending resolution by the Contractor
442	Closed	Closed	Resolved using resources from the Letter of Credit
444	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
448	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
453	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
454	Closed	Closed	Resolved using resources from the Letter of Credit
455	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
456	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
458	Open	Closed	Resolved by CFE using its own resources
459	Closed	Closed	Resolved by CFE using its own resources

MDs	GPS Conclusion	CFE Status	Comments
460	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
462	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
463	Closed	Closed	Resolved using resources from the Letter of Credit
464	Closed	Closed	Resolved using resources from the Letter of Credit
465	Closed	Closed	Resolved using resources from the Letter of Credit
466	Open	Open	Included in Collection of the Letter of Guarantee and pending resolution
467	Open	Closed	Resolved using resources from the Letter of Credit
468	Closed	Closed	Resolved using resources from the Letter of Credit
469	Closed	Closed	Resolved using resources from the Letter of Credit
472	Closed	Open	Pending resolution by the Contractor
475	Open	Open	In the process of being resolved using resources from the Letter of Credit.
476	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
484	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
485	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
489	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
490	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
493	Closed	Closed	Resolved by CFE using its own resources
507	Closed	Closed	Resolved by CFE using its own resources
509	Closed	Closed	Resolved using resources from the Letter of Credit
513	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
514	Closed	Closed	Resolved using resources from the Letter of Credit
515	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
541	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
542	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
550	Closed	Closed	Resolved by CFE using its own resources
551	Closed	Closed	Resolved by CFE using its own resources
555	Closed	Open	Included in Collection of the Letter of Guarantee and pending resolution
556	Open	Open	In the process of being resolved using resources from the Letter of Credit.
557	Closed	Closed	Resolved using resources from the Letter of Credit
561	Closed	Open	In the process of being resolved using resources from the Letter of Credit.

MDs	GPS Conclusion	CFE Status	Comments
562	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
563	Closed	Open	In the process of being resolved using resources from the Letter of Credit.
564	Closed	Closed	Resolved using resources from the Letter of Credit
570	Closed	Closed	Resolved using resources from the Letter of Credit
572	Closed	Closed	Resolved by CFE using its own resources
575		Closed	Resolved by CFE using its own resources

296. Repeated Minor Defects. Again, the Respondent comments in detail on the Minor Defects included under this heading, as well as the status of each; for which Respondent, with regard to each group of MDs that were allegedly repeated, presents the point of view stated by the Claimant, of which a comparative table of the respective MDs is part; and the Respondent then submits its response.¹⁹⁷ In the case of the MDs relating to this category, Respondent only presents Exhibit D-529, which corresponds to MDs 51 and 202.

297. The status of each of the MDs which the Claimant claims are repeated, as stated by Claimant in its Statement of Claim and by the Respondent in its Statement of Defense, is shown below.

MDs 51 and 202

The Claimant states that *both Minor Defects have the same description and that, in its analysis, GPS [GPS Expert Report I] concludes that they are repeated, therefore MD 51 should be considered to be **Closed** and MD 202 should be categorized as a Minor Defect.*

The Respondent states that *MD 202 has been **Closed** and the MD should be considered to be **Open**.*

MDs 330, 343 and 358

The Claimant states that *MD 358 includes the descriptions of MDs 330 and 343, therefore GPS concludes in its analysis [GPS Expert Report I] that they are repeated and should be considered to be **Closed**, and only MD 358 should be categorized as a Minor Defect.*

The Respondent states that *MD 358 is **open** and in the process of being resolved using resources from the letter of credit [HSBC Letter of Credit] and once MD 358 is resolved, Minor Defects 330 and 343 will be closed.*

MDs 333 and 353

The Claimant states that *MD 353 includes the description of MD 333 and GPS concludes in*

¹⁹⁷ Statement of Defense, 879 to 921 and Exhibit D-529.

*its analysis [GPS Expert Report I] that MD 333 is repeated, therefore MD 333 should be considered to be **Closed** and MD 353 should be categorized as a Minor Defect.*

The Respondent *reports that MD 333 is **Open** and that MD 353 is also **Open**, included in the letter of guarantee [HSBC Letter of Credit] and that no contract has been awarded for its resolution, therefore it should remain **Open**.*

MDs 342 and 512

The Claimant states that *both Minor Defects have the same description and GPS in its analysis [GPS Expert Report I] concludes that they are repeated, therefore MD 342 should be considered to be **Closed** and MD 512 should be categorized as a Minor Defect.*

The Respondent states that *Minor Defects 342 and 512 were resolved using resources from the letter of credit [HSBC Letter of Credit] and are now **Closed**.*

MDs 329 and 345

The Claimant states that *MD 329 includes the contents of MD 345 and GPS in its analysis [GPS Expert Report I] concludes that MD 345 is repeated, therefore MD 345 should be considered to be **Closed** and MD 329 should be categorized as a Minor Defect.*

The Respondent states that *these Minor Defects have different scopes, and that MD 345, which is **Open**, has a greater scope than MD 329, which will only be considered to be **Closed** once Empalme has resolved MD 345; therefore, the Respondent reports that MDs 329 and 345 are **Open**.*

MDs 27 and 406

The Claimant states that *the work requested by CFE in MD 406 is also reflected in MD 27, therefore GPS in its analysis [GPS Expert Report I] concludes that MD 406 is repeated and should be considered to be **Closed** and MD 27 should be categorized as a Minor Defect.*

The Respondent *reports that MDs 27 and 406 are **Closed**, resolved by the Contractor.*

MDs 21 and 473

The Claimant states that *the work requested by CFE in MD 473 is also reflected in MD 21, therefore GPS in its analysis [GPS Expert Report I] concludes that MD 473 is repeated, and should be considered to be **Closed** and MD 21 should be categorized as a Minor Defect.*

The Respondent *reports that Minor Defects 21 and 473 are **Closed**, resolved by the Contractor.*

MDs 54 and 492

The Claimant states that *the work requested by CFE in MD 492 is also reflected in MD 54, therefore GPS in its analysis [GPS Expert Report I] concludes that MD 492 is repeated and*

*should be considered to be **Closed** and only MD 54 should be categorized as a Minor Defect. The Respondent reports that MD 54 is **Closed** and MD 492 is **Open**, included in the letter of guarantee [HSBC Letter of Credit], and as of the date [of the Statement of Defense] the contract for its resolution has not been awarded, and therefore it should remain **Open**.*

298. Closed and Cancelled Defects

- a. Defects that are disputed with respect to what was indicated by the Contractor in paragraphs No. 69 and No. 649 of the Statement of Claim.¹⁹⁸

299. With regard to paragraph "a" of this section -in addition to mentioning that the Arbitral Tribunal did not note the existence of a paragraph "b"- it is important to transcribe the paragraphs of the Statement of Claim cited by the Respondent, in order to be able to analyze its position. Both paragraphs are transcribed below.

*"69. Furthermore, EMPALME has become aware that CFE has enforced concepts that the Parties already considered to be "closed" and subsequent to the enforcement, has closed MDs enforced under the HSBC Letter of Credit. As an example, we have WC 13 which, despite having been previously closed with the approval of CFE,¹⁹⁹ was the subject of enforcement of the HSBC Letter of Credit.²⁰⁰ Likewise, **MDs 119, 208 and 294** were closed by CFE subsequent to the enforcement of the HSBC Letter of Credit."²⁰¹
[Emphasis added by the Arbitral Tribunal].*

"649. On the other hand, there are several MDs that were resolved by EMPALME and on which CFE expressed its conformity with respect to the work performed. Consequently, these are not subject to analysis as to the scope of the work performed. The following is a list of the number of such MMDs, the official correspondence evidencing their closure and the date of the correspondence."

300. The list mentioned in paragraph 649 of the Statement of Claim, as mentioned when referring to the Claimant's position, is extremely extensive since it shows the 580 Minor Defects, plus "1 Other", consisting of official correspondence 742.160/JALV-072/20. For this reason, only the data corresponding to MDs 119, 208 and 294, referred to in paragraph 69 above, are indicated below, without inserting the complete table in which they are included.

¹⁹⁸ Statement of Defense, ¶¶ 922 to 937.

¹⁹⁹ Official Correspondence RO-CCEI-092-19 dated June 25, 2019 (A-036).

²⁰⁰ Second version of Exhibit 1 of Official Correspondence 7B/2020/RJMN-00140 (A-023).

²⁰¹ RO-CCEI-149/20 (A-046).

MD Number	Official Correspondence providing evidence of closing	Date of evidence of closing
119	RO-CCEI-149/20	November 23, 2020
208	RO-CCEI-149/20	November 23, 2020
294	RO-CCEI-149/20	November 23, 2020

301. The Respondent states that *Empalme's statement that the Minor Defects indicated in this section have been resolved by the Claimant is not correct, since they were resolved using the resources of the HSBC Letter of Credit, due to the Contractor's breach.*²⁰²
302. In the case of the aforementioned Minor Defects 119, 208 and 294, the Respondent merely refers as background information to various communications between CFE and Empalme, related to the respective Minor Defect, to indicate as a conclusion in each case that: "... *the Commission confirms that the minor defect [119, 208 or 294] is "CLOSED" as of November 23, 2020, resolved through a Contract awarded using resources from the collection of the Performance Bond.*"²⁰³ [emphasis added by the Respondent].
303. In the next procedural step, consisting of the filing of the Pre-Hearing Briefs, the Respondent focuses its allegations in this matter on the MDs specified below, which it contests on the basis of the documents produced by Empalme at the Respondent's request during the Document Production phase, corresponding to categories 01 to 19 of the Respondent's Request.
297. The Respondent's argument in CFE's Pre-Hearing Brief attempts to refute both the position raised by the Claimant in its Statement of Claim as well as the conclusions of Empalme's expert contained in GPS Expert Report I with regard to the following Minor Defects:²⁰⁴
- MD 204, MD 322, MD 352, MD 353, MD 364, MD 399, MD 416, MD 434, MD 448, MD 455, MD 474, MD 477, MD 494, MD 514, MD 517, MD 532, MD 542, MD 556 and MD 559.
298. In explaining in detail the status of each of the Minor Defects mentioned above,²⁰⁵ the Respondent's central argument to refute the arguments of Empalme and its valuation of those MDs, consists of its affirmation that the Claimant did not submit the documents requested by CFE; consequently, "...by not submitting the documentation requested in the "Request

²⁰² Statement of Defense, ¶ 922].

²⁰³ Statement of Defense, 923 to 937.

²⁰⁴ CFE's Pre-Hearing Brief, 16 to 38.

²⁰⁵ Valuation contained in Table 19 (Summary of estimates of open MDs), pages 136 to 135 of GPS Expert Report I, Exhibit AP-001 of the Statement of Claim.

for Production of Documents" phase, it is evident that the GPS Expert did not have the necessary supporting information to determine the amount and whose evidence should have been provided since the filing of the Statement of Claim."²⁰⁶

299. In its next procedural opportunity, in its Closing Memorial, the Respondent questions and disqualifies the four expert reports offered by the Claimant, arguing that *all of them lied*, but independently of this, it devotes its argument, in its entirety, to disputing Minor Defect 331 and Warranty Claim 17 (which are analyzed in other sections of this Award), without making reference to the other Minor Defects on which the Claimant formulated its arguments, relying on GPS Expert Report I and GPS Expert Report II.²⁰⁷
300. CFE's Closing Memorial contains a Chapter X (Procedural Objections of CFE), with regard to which in which subsection "c" (GPS Expert Team (AP-001 and AP-002), the Respondent states that *"In the case of the GPS expert team, it has not escaped the bad practices of Empalme and its legal representatives ... [inasmuch as] from the interrogation of the aforementioned group of experts, it was demonstrated that the Expert Report AP-002 was formulated based on fragments of Expert Reports (AP-003 and AP-004) that would be 'nonexistent' on the signature date of Report AP-002. The only explanation for this is that not only does this reveal that Empalme was again directly intervening in in the formulation of the conclusions of the experts, [but] it became clear that the Claimant deployed a full strategy to concentrate, review and coordinate the results of all the expert reports submitted with the objective of making all the conclusions obtained favorable to its case.*"²⁰⁸
301. As is apparent from the preceding representations of the Respondent, its assertions specifically involve Expert Reports AP-003 and AP-004, relating to Minor Defect 331 and Warranty Claim 17, which are discussed elsewhere in this Award, and those representations do not allude to any other particular Minor Defect.

Analysis of the Arbitral Tribunal with regard to MDs, with the exception of MD-331

302. The first difficulty faced by the Arbitral Tribunal in order to resolve the issues inherent to this chapter is to determine which of the 586 Minor Defects existing pursuant to the Provisional Acceptance Certificate remain as such in view of the evidence that forms part of the arbitration file as of May 2, 2022, the date of the Closing Memorials of both Parties. Having done so, the Arbitral Tribunal must determine the status of each of these Minor Defects and the effects that

²⁰⁶ CFE's Pre-Hearing Brief, ¶¶ 11 to 15.

²⁰⁷ CFE's Closing Memorial, ¶¶ 78 to 82 et seq.

²⁰⁸ CFE's Closing Memorial, ¶¶ 162 to 166.

should result therefrom, in order to finally determine the economic value corresponding to each of the Parties.

303. In its analysis process, the Arbitral Tribunal finds that according to Empalme's Closing Memorial *there are only 78 Disputed MDs*,²⁰⁹ while the Respondent states that *in order to accredit that Empalme would only be liable for 56 MDs, which jointly total USD 1,040,512.56, the Claimant submitted GPS Expert Report I*.²¹⁰
304. As it appears in the case file of this arbitration, in order to support its claims, which include those related to the Minor Defects identified in the Provisional Acceptance Report, as well as the status thereof, the Claimant submitted with its Statement of Claim the expert report contained in the aforementioned GPS Expert Report I,²¹¹ and Appendix GPS 08, which is an integral part thereof, provides brief analysis of the Minor Defects and indicating their status. On the other hand, in order to support the statements made in its Statement of Defense with regard to each of the Minor Defects mentioned, and to dispute the assertions of the Claimant's expert contained in GPS Expert Report I, the Respondent presented the Expert Report of Mr. Cámara Anzures with its Statement of Defense.²¹²
305. The foregoing is relevant because, although the Parties set forth their respective initial positions in the Statement of Claim and the Statement of Defense, it is important to bear in mind that, after the Statement of Defense was filed, the Parties had a period of more than three months to analyze the positions of the opposing Party in accordance with its respective Pleading, and to request the production of documents in the possession or under the control of the opposing Party. Once the Parties' questions regarding the documents requested by the opposing Party had been addressed, and the Arbitral Tribunal had decided on them in due course, the discovery stage was concluded and the Parties had two more months to file their respective Pre-Hearing Briefs.
306. In its Pre-Hearing Brief, Empalme refuted the statements made by CFE in its Statement of Defense, as well as the assertions contained in the aforementioned Expert Report submitted by Mr. Cámara Anzures, with which CFE contested the claims contained in Empalme's Statement of Claim, as well as the contents of the GPS Expert Report I regarding the Minor Defects identified in the Provisional Acceptance Report.

²⁰⁹ Empalme's Closing Memorial, ¶ 23.

²¹⁰ CFE's Closing Memorial, ¶ 78.

²¹¹ GPS Expert Report I, Exhibit AP-001 to the Statement of Claim.

²¹² Cámara Anzures Expert Report, Exhibit DP-001 of the Statement of Defense.

307. In support of its arguments, the Claimant submitted GPS Expert Report II with the Pre-Hearing Brief, of which Appendix No. 1 is part, containing the Technical Analysis of the Minor Defects in dispute, as of November 25, 2021. In Exhibit A-100 to the Pre-Hearing Brief, the Claimant lists such Minor Defects and describes the status of each MD as of the aforementioned date, in accordance with GPS Expert Report II and Appendix No.1.
308. Although in CFE's Pre-Hearing Brief, the Respondent again refuted the representations contained in the Statement of Claim, as well as GPS Expert Report I submitted by Empalme with its Statement of Claim, it nevertheless failed to submit any evidence to support its arguments.
309. The following table shows the various Minor Defects that are disputed by the Parties, indicating (i) the status of each such Minor Defect from the perspective of each of the Parties, taking into consideration the statements made in their respective Pre-Hearing Briefs; (ii) the 6 Minor Defects with respect to which CFE enforced the HSBC Letter of Credit; (iii) the findings of the Claimant's expert in GPS Expert Report I and its Appendix GPS 08, presented with the Statement of Claim; and, (iv) the findings of the Claimant's expert in GPS Expert Report II and its Appendix GPS 01, which refers to the Cámara Anzures Expert Report presented by Empalme with Empalme's Pre-Hearing Brief, in support of Exhibit A-100 attached to that Brief.

Status of Minor Defects as of November 25, 2021

MD No.	Status according to Empalme	Status according to CFE	Warranty Enforced	GPS I Conclusion as of February 05, 2021	GPS II Conclusion as of November 25, 2021
24	Repeated	Open		Repeated Closed	Not MD*
25	Resolved	Open		Resolved and Closed	Resolved
26	Resolved	Open		Resolved and Closed	Resolved
35	Resolved	Open		Resolved FAC*	Resolved
37	FAC	Open		Not admissible Closed	Not admissible Closed
38	Resolved	Open		Resolved	Resolved
41	Open	Open		Open	Open
42	Open	Open		Open and PFCoP*	Open
43	Open	Subsequent Closure		Open, PFCoP and RPP	
44	Resolved	Open		Resolved	Resolved
45	Open	Open		Open	Open
49	Open	Open		Open	Open

MD No.	Status according to Empalme	Status according to CFE	Warranty Enforced	GPS I Conclusion as of February 05, 2021	GPS II Conclusion as of November 25, 2021
51	Repeated, with MD-502	Open		Closed Repeated with MD 202 which is Closed	Repeated with MD-202, should be considered to be Closed
72	FAC	Open		FAC, Closed	FAC, Closed
119	FAC	Closed by CFE	YES	Closed, SC*	Closed, FAC and SCCC*
146	Resolved	Open	YES	Open	Resolved, should be Closed and SCCC
203	FAC	Open	YES	Closed, FAC	Closed, FAC and SCCC
204	Resolved	Open	YES	Open	Resolved, should be Closed and SCCC
208	Resolved,	Closed by CFE	YES	Closed, SC	Resolved, should be Closed and SCCC
212	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
234		Not analyzed		Closed, SC	
294		Closed by CFE	YES	Closed, SC	Resolved, should be Closed and SCCC
295		Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
321	Open	Open		Open, pending rescheduling by CFE and Covid 19	Open
322	Open, as Empalme proceeds	Closed by CFE	YES	Open	Admissible, take into account value in GPS Expert Report II
324	FAC	Closed by CFE	YES	Open, load test still to be performed	Resolved, should be Closed and SCCC
329	Repeated with MD-345	Open		Open	Repeated and should be closed
330	Repeated with MD-343 and MD-538	Open	YES	Repeated with MD-358	FAC, should be closed and SCCC
331	Subject to special analysis	Subject to special analysis	YES	Subject to special analysis	Subject to special analysis
338	Open	Open		Open	Open
341	Closed	Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
342	Closed	Closed by CFE	YES	Closed, Repeated with MD-12	Repeated, should be closed and SCCC
343	Closed	Open	YES	Closed, Repeated with MD-358	Repeated, should be closed and SCCC
345	Open	Open		Closed, MD-329 applies	Open

MD No.	Status according to Empalme	Status according to CFE	Warranty Enforced	GPS I Conclusion as of February 05, 2021	GPS II Conclusion as of November 25, 2021
349	Resolved, Closed	Open	YES	Resolved, Closed	Resolved, should be Closed and SCCC
351	Resolved	Open	YES	Resolved, Closed	Resolved, should be Closed and SCCC
352	Open	Open	YES	Open	Open
353	Open	Open	YES	Open	Open
356	Resolved	Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
358	Open, Partially resolved	Open	YES	Open	Resolved, should be Closed and SCCC
360	Open	Subsequent closure		Open	
364	Closed	Closed		Open	Closed
365	FAC	Open		Closed	FAC, should be closed
368	FAC	Open	YES	Resolved and FAC, Closed	FAC, should be Closed and SCCC
371	Open	Open	YES	Open	Open
375	Island Mode test impossible	Open	YES	Closed, scope of Empalme	IRP*, should be considered Closed
376	Closed	Not analyzed		Closed, SC	
377	FAC	Open	YES	Resolved, FAC and Closed	FAC, should be Closed and SCCC
385	Resolved	Closed by CFE	YES	Resolved and Closed	Resolved, should be Closed and SCCC
387	FAC	Open	YES	Resolved and FAC	FAC, should be Closed and SCCC
392	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
393		Not analyzed		Closed, SC	
399	Open	Open	YES	Open, RPP	Open
416	Open	Open		Open, RPP	Open
429	FAC	Closed by CFE	YES	Resolved and Closed	Closed
431	Resolved	Open	YES	Resolved and Closed	Resolved, should be Closed and SCCC
432	FAC	Closed by CFE	YES	Closed, FAC	FAC, should be Closed and SCCC
433	Open	Open	YES	Closed. Not possible in package equipment	Closed and SCCC
434	Open	Closed by CFE	YES	Open	Admissible, take into account value in GPS Expert Report II

MD No.	Status according to Empalme	Status according to CFE	Warranty Enforced	GPS I Conclusion as of February 05, 2021	GPS II Conclusion as of November 25, 2021
436	Open	Open	YES	Open	Open
437	Open	Open	YES	Open	Open
438	Open	Open	YES	Closed	FAC, should be Closed and SCCC
440	Open	Open		Closed	Repeated missing items Should be closed
442	Closed	Closed by CFE	YES	Closed	Closed and SCCC
444	FAC	Open	YES	FAC, Closed	FAC, should be Closed and SCCC
446	FAC	Closed by CFE	YES	FAC, Closed	FAC, should be Closed and SCCC
448	Open	Open	YES	Open	Open
450	FAC	Open	YES	FAC, Closed	FAC, should be Closed and SCCC
453	Open	Open	YES	Open	Open
454	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
455	Open	Open	YES	Open	Open
456	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
457	Open	Open	YES	Open	Open
458	Open	Open	YES	Open	Not admissible collection of Letter of Credit
459	Repeated	Closed by CFE	YES	Closed	Repeated, SCCC should be closed.
460	Resolved	Open	YES	Closed	Resolved, should be closed
462	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
466	Open	Open	YES	Open	Resolved, should be Closed and SCCC
467	Open	Open	YES	Open	Admissible, take into account value in GPS Expert Report II
468	FAC	Closed by CFE	YES	Closed	FAC, should be Closed and SCCC
469	Resolved	Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
472	Open	Open		Closed	FAC, should be closed
474	Open	Open	YES	Open	Open
475	Open	Open	YES	Open	Open
476	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC

MD No.	Status according to Empalme	Status according to CFE	Warranty Enforced	GPS I Conclusion as of February 05, 2021	GPS II Conclusion as of November 25, 2021
477	Open	Subsequent closure		Open	
482	Resolved	Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
484	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
485	Resolved and IRP	Open	YES	Closed	Resolved, should be Closed and SCCC
487	Open	Open	YES	Open	Open
489	IRP	Open	YES	Closed	IRP, should be considered Closed
490	IRP	Open	YES	Closed	IRP, should be considered Closed
492	Repeated	Open	Open	Closed, Repeated	Repeated, should be closed
493	Resolved	Closed by CFE	YES	Repeated	Resolved, should be Closed and SCCC
494	Open	Open	YES	Open	Open
507	FAC	Closed by CFE	YES	Closed	FAC, should be closed
509	FAC	Closed by CFE	YES	Closed	FAC, should be closed
512	Open	Closed for CFE	YES	Open	Admissible, take into account value in GPS Expert Report II
513	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
514	FAC	Closed by CFE	YES	Closed, FAC	FAC, should be Closed and SCCC
515	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
517	Open	Open	YES	Open	Open
532	Open	Open		Open	Open
535	Open	Open	YES	Open	Open
541	Resolved	Open	YES	Closed	Resolved, should be closed
542	IRP	Open	YES	Closed	IRP, should be considered Closed
547	Open	Open	YES	Closed	Open
550	Resolved	Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
551	Closed	Closed for CFE	YES	Closed	
554	Open	Open	YES	Open	Open

MD No.	Status according to Empalme	Status according to CFE	Warranty Enforced	GPS I Conclusion as of February 05, 2021	GPS II Conclusion as of November 25, 2021
555	FAC	Open	YES	Closed	FAC, should be Closed and SCCC
556	Open	Open	YES	Open	Open
557	FAC	Closed by CFE	YES	Closed	FAC, should be Closed and SCCC
558	Open	Open	YES	Open	Open
559	Open	Open	YES	Open	Open
560	Resolved	Closed by CFE	YES	Open	Resolved, should be Closed and SCCC
561	Resolved	Open	YES	Closed	Cause MD not attributable; should be closed and SCCC
562	Resolved	Open	YES	Closed	Cause of MD not attributable; should be closed and SCCC
563	FAC	Closed by CFE	YES	Closed	FAC, should be Closed and SCCC
564	FAC	Open	YES	Closed	FAC, should be Closed and SCCC
570	Resolved	Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
571	Open	Open	YES	Open	Open
572	Resolved	Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
575	Resolved	Closed by CFE	YES	Closed	Resolved, should be Closed and SCCC
Siemens 1	Resolved	Open	YES	Closed	Resolved, should be Closed and SCCC
Siemens 3	Resolved	Subsequent Closure		Closed	Resolved, should be Closed and SCCC
Siemens 4	Resolved	Closed by CFE	YES**	Closed	Resolved, should be Closed and SCCC
Siemens 5	Resolved	Closed by CFE	YES**	Closed	Resolved, should be Closed and SCCC

* Abbreviations:
MD: Minor Defect
FAC: Outside the Scope of the Contract
RPP: Plant Shutdown Required
Warranty
Enforced: HSBC Letter of Credit
PFCoP: Cash Flow or Payment Issue
SC: No Comments
SCCC: No Charge to Letter of Credit

IRP: Impossibility of performing tests for reasons not attributable to Empalme.

***In Appendix No. 1 (Technical Analysis) of GPS Expert Report II, it is stated that "as CFE states, the MD is Closed and no resources from the collection of the Performance Bond were used in the resolution of this MD".*

NOTE: The status of a MD may possibly vary in the future from what is shown on the table, according to Empalme or according to CFE, since the status that originally existed as of the date of the Statement of Claim or Statement of Defense may have been modified subsequently. For purposes of the above table, the status of the MD should be the one resulting from the last GPS Expert Report, that is, as of November 25, 2021.

310. From the foregoing, it is clear that, as of May 2, 2022, date of CFE's Closing Memorial, Empalme had filed the Empalme Pre-Hearing Brief five months earlier, with which Exhibit A-100 identified from its perspective the status of each of the original Minor Defects, in which 41 "Open" Minor Defects according to Empalme and 84 "Open" Minor Defects according to CFE are indicated, without the Respondent having contested the above in CFE's Closing Memorial. The fact of the matter is that CFE does not refer to any specific MD, with the exception of MD-331, which the Arbitral Tribunal analyzes below.
311. Likewise, it should be noted that the Claimant also attached GPS Expert Report II to Empalme's Pre-Hearing Brief, of which Appendix GPS 01 (Technical Analysis of the Minor Defects) is a part, in which 88 Minor Defects are analyzed in detail; and although it is unquestionable that the Respondent also had this Appendix at its disposal, since in its Closing Memorial CFE repudiates GPS Expert Report II in general terms,²¹³ it also does not refer to - much less refute- the analyses and conclusions of the Empalme expert contained in the aforementioned Appendix GPS 01.
312. In this context, the Arbitral Tribunal proceeds to analyze the circumstances of each of the Minor Defects that remain disputed as of the date of submission of the Closing Memorials of the Parties, which contain their last arguments, based on the evidence that forms part of the case file, including the Transcript.
313. El Tribunal Arbitral takes into consideration that, as of the date of Empalme's Closing Memorial, of the 586 Minor Defects identified in the Provisional Acceptance Report,²¹⁴ the Empalme expert conducts a detailed analysis of the 88 Minor Defects identified in Appendix No. 1 of GPS Expert Report II; and as a result of that analysis, identifies 7 Minor Defects that Empalme claims should be considered to be "Closed" (MD 51, MD 330, MD 333, MD 342, MD 343, MD 345 and MD 492) and 3 Minor Defects (MD 202, MD 358 and MD 512), which

²¹³ CFE's Closing Memorial, ¶¶ 78, 79 and 162, among others.

²¹⁴ Exhibit A-109, Provisional Acceptance Report, Exhibit 9 (List of Minor Defects).

should also be considered "Closed."²¹⁵ Subtracting these last 10 MDs from the 88 MDs subject to the technical analysis mentioned above, results in the 78 Disputed MDs referred to by Empalme.²¹⁶

314. With regard to the aforementioned technical analysis, the Arbitral Tribunal notes that, in CFE's Pre-Hearing Brief the Respondent contests certain Minor Defects related to its previous Request for Production of Documents, which were the subject of that technical analysis (MD 204, MD 322, MD 352, MD 434, MD 514 and MD 542), but does not include them again in the arguments made in CFE's Closing Memorial, nor were they addressed in the Hearing, in which its expert also did not mention those Minor Defects.
315. Although in CFE's Pre-Hearing Brief the Respondent contests other Minor Defects also related to its previous Request for Production of Documents (MD 353, MD 364, MD 399, MD 416, MD 448, MD 455, MD 474, MD 477, MD 494, MD 517, MD 542, MD 556 and MD 559), the latter were not the subject of the technical analysis mentioned above; and again, the Respondent does not include them again in the arguments of CFE's Closing Memorial or at the Hearing, where they were also not mentioned by its expert engineer Lorenzo José Cámara Anzures.
316. The Arbitral Tribunal noted this at the Hearing, both with the presentation of the Respondent's expert and in the cross-examination of the Respondent's expert, as can be seen from the following excerpt from the Transcript:²¹⁷

"Santiago Oñate: ...

I am going to share your expert report with you, again, and I am going to take you to paragraph 263.

Can you display it?

In this paragraph you begin what you refer to as a technical analysis and specific opinion of the MDs and WCs, requested by the commission, right?

Lorenzo José Cámara Anzures: That's what it says.

Santiago Oñate: And the way in which you present your analysis is that first you describe what the minor defect consists of, then, (sic) what the response or position of the Federal Electricity Commission is. And finally you end with what you call the expert's opinion, right?

Lorenzo José Cámara Anzures: You only failed to indicate, effectively, the description of the defect. Subsequently, the opinion or conclusion of GPS, then the response of CFE and, indeed, my opinion.

²¹⁵ Appendix No. 1 of GPS Expert Report II.

²¹⁶ Empalme's Closing Memorial, ¶ 23.

²¹⁷ Transcript 17-02-2022 (Part 4), pages 23 to 25.

Santiago Oñate: Okay.

I am going to allow you to show your report again. I apologize for this intermittence, the Internet has been a little slow in uploading the document, but I will show it to you right now.

I will show you some examples.

In this you analyze MD-375, can you see it on the screen?

Lorenzo José Cámara Anzures: Yes.

Santiago Oñate: Very good.

Here we follow this description that I gave you, it starts with a description of what the minor defect consists of, if we go down a little we see CFE's response, then if we go down a little you have your expert report, which are five lines in which you give your opinion.

And it says: since there was confusion on the part of the contractor as to the applicable warranty period, the corresponding tests were not performed. However, with the enforcement of the performance bond, the contractor is released from this liability and, therefore, this minor defect must be resolved by the commission for closure, did I read it correctly?

Lorenzo José Cámara Anzures: That is correct.

Santiago Oñate: I will show you another example.

Let's go to MD-515, on page 96. The same, you writes what the minor defect consists of, then, if we go down we see that you give an account of CFE's response, and you conclude with two lines of analysis on the minor defect, and you state: with the application of the performance bond the contractor is released from this liability and it should be considered open, but at the commission's expense.

Did I read it correctly?

Lorenzo José Cámara Anzures: Yes, that is correct.

Santiago Oñate: Would it surprise you if I told you that these two paragraphs that we have just seen, both the one you use for the analysis of MD-375 and MD-515 are the only two paragraphs you use to analyze all the Minor Defects in your expert report?

Lorenzo José Cámara Anzures: Am I surprised? No, I am not surprised.

Santiago Oñate: Okay. Thank you.

Let's move on to the analysis of warranty claims.

..."

317. From the Cámara Anzures' Expert Report²¹⁸ it is clear that under the heading "Technical Analysis and Specific Opinion of the MDs and WCs requested by the Commission", the

²¹⁸ Cámara Anzures Expert Report, 263 to 535, Exhibit DP-001 of the Statement of Defense.

CFE expert presents an analysis of only 14 Minor Defects, which are indicated below, as noted by Empalme's expert in the Table of its second report.²¹⁹

MD 331, MD 375, MD 436, MD 437, MD 444, MD 489, MD 490, MD 515, MD 517, MD 542, MD 556, MD 558, MD 561 and MD 562.

318. From a reading of the technical analysis of the Minor Defects cited, the Arbitral Tribunal notes that, with the exception of MD 331, to whose analysis CFE's expert devotes considerable time, he fails to refer to the other Minor Defects mentioned by Empalme in its Statement of Claim. With regard to each of the remaining 13 Minor Defects, the Cámara Anzures Expert Report offers literally the same opinion expressed with regard to MD 375 and MD 515, regarding which he was questioned at the Hearing by Empalme's representative in the cross-examination, as stated in the transcript cited above.
319. By virtue of the foregoing circumstances, it is evident that the Respondent failed to dispute the assertions contained in Empalme's Pre-Hearing Brief, as well as in the two expert reports submitted by the Claimant and in the technical analysis that forms part of GPS Expert Report II, without the Respondent being able to refute them.
320. From Empalme's Closing Memorial, it is clear that according to its representations, the status of the Minor Defects identified in the Provisional Acceptance Report, as of November 25, 2021, is the one outlined in Exhibit A-100 of Empalme's Pre-Hearing Brief. That Exhibit lists the 586 original Minor Defects, of which, as of the aforementioned date, according to CFE, 84 should be considered to be "Open", while only 41 should have that status according to Empalme.
321. Likewise, in order to support its claims with regard to each of the Minor Defects that remain in dispute, the Claimant submitted as Exhibit AP-002 to the Empalme Pre-Hearing Brief, the Expert Report for the Empalme Pre-Hearing Brief (GPS Expert Report II), to which the technical analysis of 88 Minor Defects is attached as Appendix No. 1.
322. As the Arbitral Tribunal notes when analyzing GPS Expert Report II and the terms of the aforementioned Appendix No. 1, Empalme's expert notes the description of the respective MDs issued by CFE, and immediately thereafter, the expert states the response made by CFE in its Statement of Defense, with respect to what Empalme stated in its Statement of Claim with regard to that same MD. Then, the expert conducts a technical analysis of the each MD in turn and formulates his conclusions on whether the respective MD should be considered to be "Open" or "Closed".

²¹⁹ GPS Expert Report II, ¶¶ 120 to 123, Exhibit A-002 of Empalme's Pre-Hearing Brief.

323. In order to determine the "Open" or "Closed" status that should correspond to the respective MD, it is necessary to consider factors such as the validity of the Warranty Period and Empalme's liability during that period, the performance of the tests specified in the Contract and the acknowledged impossibility of performing certain tests due to causes not attributable to Empalme, as well as the justification for the delay in resolving certain Minor Defects, for reasons not attributable to Empalme. All these issues were considered by the Claimant's expert, both in GPS Expert Report II and in its Appendix GPS 01, with which Empalme refutes the contents of the Expert Report prepared by Mr. Cámara Anzures, the Respondent's expert.
324. In addition to what is mentioned in the previous paragraphs, the Arbitral Tribunal notes that in the technical analysis of each MD, as part of his analysis and in his conclusions, Empalme's expert comments on whether or not it is appropriate -depending on the nature of the respective MD- for CFE to charge Empalme for the cost of resolving the MD, either through the letter of credit or by demanding direct payment from Empalme.
325. As can be seen from the above table, as well as from the positions and filings of the Respondent and its expert, which are contained in the memorials submitted by CFE and in the Expert Report submitted by Eng. Cámara Anzures, as well as his participation at the Hearing, the final status of the Minor Defects in dispute is the one shown in that table, since the Respondent failed to refute the Claimant's claims and the conclusions of its expert, which are the result of the technical analysis of those Defects and are described in detail in Appendix No. 1 of GPS Expert Report II.
326. With regard to the above, it should be noted that Section 10.1.1 of GPS Expert Report II presents a "Valuation of Minor Defects (MD)" Table 10, which contains a summary of the estimate of Open MDs and is inserted below. With regard to this table, the GPS expert explains that.²²⁰

"232. For the analysis of the cost estimate of the MDs as mentioned in the initial GPS report, [GPS Expert Report I, 407 to 412, with Table 19, Exhibit AP- 001 of the Statement of Claim] the value of MDs that were resolved by EMPALME is being subtracted. And GPS considered (sic) that it had no liability for their closure. In addition, the cost of the MDs assigned by CFE to the Minor Defects that had already been discounted by CFE in the agreements established and discounted for the Provisional Acceptance of the Plant were also discounted. These include MD-26, MD-35, MD-375, MD-489, MD-514 and MD-542. For this analysis they were considered to be negative and were discounted from the total.

²²⁰ GPS Expert Report II, ¶¶ 232 to 234, Exhibit A-002 of Empalme's Pre-Hearing Brief.

...

234. According to the aforementioned table, [that is, the one included below] the calculation made by GPS for the open and discounted Minor Defects is Eight Hundred Eighty-One Thousand, Five Hundred Forty-Eight US Dollars and 94/100 (**USD 881,548.94**) which EMPALME must credit to CFE."

Table 10. Summary of Open MD Estimates

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
26	Install a booth for cathodic protection rectifiers located in the intake works. 7.3.4.10.5 cathodic protection technical characteristics.	-128.000,00	0.00	-6.034,04	The value presented in the initial GPS Expert Report has been ratified. It is discounted according to the technical analysis.
35	The gas heater and gas filter transmitters are mounted in the gas heater package without a cabinet. They must be installed in NEMA 4X cabinets.	-37.397,36	0.00	-1.762,95	The value presented in the initial GPS Expert Report has been ratified. It is discounted according to the technical analysis.
41	In the TG server failure, it was detected that the TG control systems are not operated from the DCS. "The integration to the DCS of the control system of the turbogas units and Steam Turbine will verified in such a way that the operation and supervision is done through the DCS operating stations, however,	0.00	0.00	0.00	Cost included in the cost of MD 457 and MD-466.

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
	the load control of the units is available from the SCD				
42	<p>The implementation of the Supervisory system must be complemented by the implementation of dynamic variables of the gas turbogenerators, with the software and hardware to perform the functions of the concepts listed below:</p> <ol style="list-style-type: none"> 1. Spectral analysis. 2. Balancing analysis. 3. Lissajous or orbits analysis. 4. Bode diagrams. 5. Cascade diagrams. 6. Line center diagrams. 7. Waveform diagrams. 8. List of phase angle global signal values. 	0.00	72,200.00	72,200.00	The value presented in the initial GPS Expert Report has been ratified.
43	<p>The implementation of the steam turbogenerator dynamic variables supervisory system must be completed. With the software and hardware to perform the functions of the concepts listed below:</p> <ol style="list-style-type: none"> 1. Spectral analysis. 2. Balancing analysis. 3. Lissajous or orbits analysis. 4. Bode diagrams. 5. Cascade diagrams. 6. Line center diagrams. 7. Waveform diagrams. 8. List of phase angle global signal values. 	0.00	0.00	0.00	Closed with official correspondence 742.160/JALV-009/21 dated August 24, 2021. Not associated with an economic amount charged to EMPALME.
45	Complementation is required of the supply of the simulation software "that emulates the dynamic conditions of the units and complete Combined Cycle, capable of faithfully reproducing the performance of the Plant under various normal operating conditions, startup-shutdown, among others, as well as the corresponding course for the	0.00	151,060.00	151,060.00	<p>The value presented in the initial GPS Expert Report has been ratified.</p>

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
	management of this emulator, which consists of training for 8 operators with a duration of 80 hours, in accordance with the provisions of Exhibit 1 of the Contract, subsection E).				
49	It is observed that some control valves lack bypass and isolation valves, therefore they must be installed. Point 7.3.5.11 control valves indicates that a bypass valve should be installed for each control valve, and that the control valves should be installed in an easily accessible location for maintenance.	74,000.00	0.00	3,488.43	The value presented in the initial GPS Expert Report has been ratified.
321	Teach the pending course on the TG excitation system, section 7.6.2.47 (training on installation, maintenance and operation, etc.)	0.00	10,080.00	10,080.00	Estimated according to the time of CFE communication No ROP CCE1-166/20. The value presented in the initial GPS Expert Report has been ratified.
322	Course for operators according to section 5.1.2, subsection E "Operations Department" of Exhibit 1, emphasizing that the practical part of this course shall be carried out at the plant's operating stations and using simulation software that emulates the operating conditions of the units and the combined cycle, which shall be installed in the instrumentation and on control laptops.	2,433,216.00	0.00	114,704.00	GPS endorses the closing value presented by the CFE Expert and maintains the exchange rate used in The initial GPS Expert Report.
329	Verify the airtightness of the enclosures in the GVRC control cabinets and in the electrical and control building, with fire protection system (FM200).	0	0	0	This MD is repeated with MD 345, therefore, no value should be taken into account for this work.
338	THE FOLLOWING LEAKS HAVE BEEN DETECTED: 1) Leak in safety valve PSV 11HAC6OAA2O1, in Low Pressure Dome RCI. CLOSED REF.		9,525.00	9,525.00	From this MD only points 2 and 22 remained open.

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
	<p>CSPPS-CCEI-1315-2019</p> <p>2) Leak in Local Level Indicator of the Medium Pressure and High Pressure Dome of the RCI.</p> <p>30) Leak in isolation valve of demineralized water tank level transmitter D195 (CLOSED Ref. CSPPS-CCEI-1153- 2019).</p> <p>It is requested that each be corrected and that their standardization be verified as a whole.</p>				For the valuation, the Purchase Order EMPI-SROP-OC-0116 from the supplier Cerey S.A. de CV. Is included ¹⁷ which applies to pending items 2 and 22.
345	Check the functionality of the airtightness in all the enclosures of the Plant that have a FM 200 fire extinguishing system, according to NFPA 2001 2012 edition.	380,522.95	0	17,939.61	EMPALME obtained a quote for the closing works of this MD. The quoted value corresponds to ICISA ¹⁵ The value is adjusted to reflect the quote from supplier ICISA.
352	Damage is noted on the fixed seat and stem of the BP steam stopcheck valve and HEATED STEAM valve 11/12LBA50AA001 and 11/12LBB10AA001, we request that these be evaluated, corrected or replaced.	1,462,157.20	109,798.80	178,726.21	Damage to a 28" valve was corrected. The value is adjusted based on the estimate presented in the initial GPS Expert Report. 2 18" valves and one 28" valve plus labor remain in the cost. ¹⁹
353	Lack of HVAC efficiency is observed in the inverter room and battery room area (inverter room, control room, office area in electrical building and chemical laboratory).	6,019.74	1,054.42	1,338.20	The value presented in the initial GPS Expert Report has been ratified.
358	Verify the calibration of the safety valves of the cold superheated steam system in common head with KKS PSV10LBC10AA201, 10LBC10AA202, 10LBC10AA203 which during cold start operation of power train 12 on February 18, 2019, triggered the safety valves mentioned above and these are now permanently leaking, thus damage to the valve internals is presumed. Resolution is requested.	160,000.00	5,555.18	13,097.72	According to the exhibit to the Statement of Defense, CFE purchased a new valve. EMPALME reported that the valve internals were changed and calibrated by Emerson and the reports were delivered to CFE on August 27, 2019 and September 28, 2019. The problem that resulted in the MD was due to a plant trip in August 2019, when

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
					CFE was responsible for the plant. The estimated amount included by GPS in the initial Expert's Report is maintained, as it is partially open.
360	During the cold and warm startup time testing stage, there were operating issues in the ejector bank of the vacuum system as there was no condensate flow, therefore the ejectors were changed to correct the problem. We also request that the functionality of the ejectors be tested.	0	0	0	This MD was officially closed by CFE without charge to the performance bond, by means of official communication SPPS/CCEI-1602/2021. ²⁰
371	TGI, TG2 and TV UNIT GENERATORS 1) Verify the RFM generator monitoring equipment (PDM monitoring method is also acceptable) and GCM particle monitoring (partial discharges), according to the Terms of Reference 7.3.4.16.1. 2) Verify the independent online monitoring system for short circuit detection between turns of the field winding of the electric Generators, according to the Terms of Reference.	0.00	6,200.00	6,200.00	The value is adjusted according to the quote provided by supplier GIRSA IRIS POWER ²¹ requested by EMPALME.
375	Verification is required of the island mode operation of the TGs in Combined Cycle mode by operating a plant electrical protection.	0.00	-10,609.79	-10,609.79	The value of the initial GPS Expert Report is maintained, which was calculated according to the weighted value agreed upon with CFE. CFE is deducting an amount that had already been deducted.
399	Verification is required to ensure that the auto sync test mode function is enabled. Un TV unit 3.	157,600.54	0.00	7,429.43	The value is adjusted according to the quote provided by LOSNOGA ²¹ dated September 13, 2021, sent to EMPALME.
416	Verification is required of the measurements in the disturbance log for field voltage and field current	145,750.22	0.00	6,870.80	The value is adjusted based on the quote provided by supplier LOSNOGA ²³ dated

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
	of the TGs and TV.				September 13, 2021, sent to EMPALME.
434	In the sanitary system, review is required of the conditions of flow transmitter 10GUA40CF001 and the necessary verifications of the instrument should be performed.	22,800,.27	0.00	1,074.83	The value is adjusted based on the quote provided by supplier LOSNOGA ²⁴ dated September 13, 2021, sent to EMPALME.
436	Check the conditions of Medium Pressure bypass 11LBB20AA090 for opening and closing and perform the corresponding checks.	1,264,104.44	0.00	59,591.03	Empalme delivered the spare parts required for the closure of this MD to CFE. The total amounts associated with MD-436 of the 3 support contracts delivered by CFE No 201028, 211002 and 203002, is \$1,488,119.51, the same amount reported by the CFE expert. It was identified that only the items assigned in Contract 201028, for a value of \$1,264,104.44 actually apply to the closure of MD-436.
437	Check the conditions of the GVRC2 high pressure bypass for opening and closing and perform the corresponding checks.	632,052.22	0.00	29,795.51	The amounts associated with MD-437 for the 3 support contracts provided by CFE No 201028, 211002 and 203002, is \$2,191,633.5, which differs from the value provided by CFE expert, who presents MX 2,176,838.36 *It was identified that only the concepts assigned in Contract 201028 (from Turbopower services), for a value of MX 1,264,104.44 actually partially correspond to MD-437, since it includes work on

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
					bypass valves for GVRCl and GVRC2. * Only 50% of the value is considered.
445	Conclude the revision of DCS screens (graphics) and descriptions in Spanish, as well as the TV screens, TGs and package equipment in the DCS Distributed Control System.	0.00	0.00	0.00	The TV costs are included in the closing value of MD 466 and the costs of the TGs in those of MD 457, therefore no cost is included in this MD.
448	As a follow-up to CSPPS/CCEI-791/2019, a report on the root cause of the problem that occurred in the motorized valves of the AP, MPyBP startup vents of GVRCs 1 and 2 is requested.	0.00	4,500.00	4,500.00	The value presented in the initial GPS Expert Report has been ratified.
453	Follow-up and response to preventive letter CP-IyC-13, related to the speed sensor of the drive shaft of both TGI and TG2 units.	0.00	4,500.00	4,500.00	The value presented in the initial GPS Expert Report has been ratified.
455	Delivery is requested of evidence of response to official correspondence CSPPS/CCEI-248/2017, related to the list of pending PCI TGI.	108,644.88	0.00	5,121.62	The value is adjusted based on the quote provided by supplier INTIME CONTROL ²⁵ dated September 29, 2021, sent to EMPALME.
457	Verify and check the HMI graphics (interface, alarms and descriptions) of the T3000 control system of the TG1 and TG2 gas turbines, which must be in Spanish and the engineering units in the SI international system. Also verify and check the screens of the TGs in the distributed control system DCS.	0.00	142,478.55	142,478.55	The value presented in the initial GPS Expert Report has been ratified.
458	Delivery is requested of evidence of response to official correspondence CSPPS/CCEI-322/2018, incident involving load derating and tripping of the TGI and TG2 units.	0.00	0.00	0.00	What is required in this MD is not associated with an economic value. There was no impact on the electrical equipment, there is no specific document that Siemens has delivered regarding these tests performed and it was pointed out that there has been no sign of

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
					subsequent damage.
466	Verify and check that the TV screens (graphics) descriptions are in Spanish and verify that the TV screens are in the DCS Distributed Control System.	110,563.00	0.00	5,212.04	The value is adjusted based on the quote provided by supplier RAHE ²⁶ dated June 30, 2021, sent to EMPALME.
474	Derived from the continuous supervision, specifically in the communication with the Beckwith relays of the Turbines, it has been detected that while the Modbus protocol is in operation, this is configured in the Foxboro Evo system (DCS), when IEC 61850 is requested by the contract. Therefore, we request that the necessary corrections be made in order to ensure compliance with the Contract, as well as to carry out joint CFE/SAPI verification.	172,500.60	0.00	8,131.83	EMPALME obtained two quotes for the works required to close this MD. The lowest quote corresponds to Losnoga, ²⁷ in the amount of \$172,500.60 MXN. The value is adjusted based on the quote provided by supplier LOSNOGA dated September 13, 2021, sent to EMPALME.
475	Verify conditions and perform checks corresponding to the following instruments: 10GCF50CF002 10GCF50CF001 10GBK10CF001 10GCF60CF002 10GCF60CF001 10GUA40CF001 10GUA20CF001 10GBK10CF001	174,341.23	0.00	8,218.60	GPS endorses the closing value presented by CFE Expert and maintains the exchange rate used in the initial GPS Expert Report.
477	Verify the condition of the switches of communication links 1 and 2, and check that the communication links with the package equipment complies with the Schneider manufacturer's architecture.	0.00	0.00	0.00	Closed with official correspondence CSPPS- CCEI-1613-2021 dated October 19, 2021. This MD has no economic amount associated with its closure at EMPALME's expense.
487	Conclude the checks corresponding to the axial vibration sensors of both TG and TG2 units.	118,949.25	0.00	5,607.38	EMPALME obtained three quotes for the work required to close this MD. The lowest price quoted corresponds to ICIPM. ²⁸ The value is

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
					adjusted based on the quote provided by supplier ICIPEM dated October 11, 2021, sent to EMPALME.
489	Verify the dynamic response performance of 1%, 3% and 5% of the GVRCS.	0.00	-9,298.47	-9,298.47	The value presented in the initial GPS Expert Report has been ratified, which was calculated according to the weighted value agreed upon with CFE. CFE is deducting an amount that had already been deducted.
490	Perform final tuning of the medium pressure bypass control loop.	0.00	-21,219.57	-21,219.57	The value presented in the initial GPS Expert Report is maintained, which was calculated according to the weighted value agreed upon with CFE. CFE is discounting an amount that had already been discounted.
494	Verify and check the conditions of the level indicator lights of the AP, MP and BP domes of the GVRCL and GVRCL2, located in the control room, and ensure that the field measurements coincide with the local indicators in the control room.	132,400.54	0.00	6,241.48	The value is adjusted based on the quote provided by supplier LOSNOGA ²⁹ dated September 13, 2021, sent to EMPALME.
512	Verify and check that the valve (10GAC20AA080) at the discharge of pump B of the seawater supply system, does not present any failure and perform the following corresponding verifications in automatic mode.	39,857.16	0.00	1,878.90	The value of the CFE Expert is considered, maintaining the exchange rate of the expert report presented by GPS.
517	Verify and check that the TV load and pressure controls work automatically without human intervention, as well as that the control changes are performed automatically without loss of power in the TV.	198,748.39	0.00	9,369.18	The value is adjusted based on the quote provided by supplier INTIME CONTROL ¹⁰ of September 29, 2021, sent to EMPALME.
532	Verify and perform the checks on the Site area switch system to ensure that the telephone	55,139.40	0.00	2,599.32	The value presented in the initial GPS Expert Report has been

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
	equipment and switch are configured and available.				ratified.
535	Verify and check that according to section 7.3.4.2.2.3.3.14.3.3 "Characteristics of the access and operation stations of the PMUs of the plant to be installed in the control area", the correct PMU operating station, as well as the user manuals and licenses, software licenses for access and operation of the PMUs based on the IEEE 37.118 standard and the desk and modular chair for the operator.	13,780.00	0.00	649.60	GPS endorses the value presented by the CFE Expert and applies the exchange rate used in the initial GPS Expert Report.
542	Verify and check that there are no more vibrations in the MP and BP bypass valves.	0.00	0.00	0.00	* The discount invariably included in the GPS expert report is not taken into account.
547	Verify and check that the flow transmitters listed below are not saturated: -10LCA40CF001 - 10GHC43CF001	59,600.89	0.00	2,809.64	The support provided by CFE corresponds to the analysis and diagnosis of the demineralized water measurement in Empalme I and II. These analyses are not part of any MD, therefore the amount declared by CFE of \$78,000 MXN is not admissible. EMPALME obtained two quotes for the work required to close this MD. The lowest quote was from Losnoga, ³¹ for \$59,600 MXN.
554	Verify and improve the functioning of the communication of Node 2 of the PCI (from the administrative building to the electrical and control room).	195,194.31	0.00	9,201.64	GPS endorses the closing value presented by the CFE expert and applies the exchange rate used in the initial GPS Expert Report.
556	Verify and check the automatic sequence of the Master Control, once the following components of the equipment listed below have been replaced: 1) Main cooling system (pump	3,421.20	0.00	161.28	The cost support concept presented by CFE is not related to the activities required for closure of this MD. The value presented in

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
	discharge valve 10PAC11AP001). 2) GVR2 (the electronic board of the high pressure dome purge valve). 3) TV (10MAB50AA080 medium pressure shutdown heating valve).				the initial GPS Expert Report is ratified.
558	Verification of the auxiliary steam control change (when changing the steam supply from the cold reheat line to the main steam) when performing the bypass capacity test at 100% load of the Cycle. Also included in the scope of this minor defect is the installation of a new heating line with its valves, accessories and corresponding tests.	280,750.72	0.00	13,234.84	Numerical 50 of the itemization presented by CFE in the Request for Production of Documents shows a total of \$234,617.79 MXN for MD-558 ESP-C001 for a total of \$9,423.08 MXN. ESP C002 for a total of \$12,266.00 MXN ESP C013 for a total of \$10,303.26 MXN ESP-C014 for a total of \$45,797.13 MXN ESP C017 for a total of \$12,266.00 MXN ESP-C018 for a total of \$12,266.00 MXN ESP C022 for a total of \$132,296.34 MXN The aforementioned items are not related to MD 558; therefore, the amount of \$234,617.79 MXN declared by CFE is not admissible. EMPALME obtained two quotes for the work required to close this MD. The lower quoted value corresponds to Losnoga ³² for \$280,750.72 MXN.
559	Verify and check the performance calculations at 50%, 75% and 100% load of the Combined Cycle. Section 7.7.1.2.6.3 of the Terms of Reference for the Bid refers to the following calculations: - Unit thermal consumption of the cycle in real time - Online droop calculation - Thermal regime per unit - Efficiency of GVR2 and GVR2	332,159.37	0.00	15,658.29	The value is adjusted based on the quote provided by supplier INTIME CONTROL ³³ dated September 29, 2021, sent to EMPALME.

MD No.	DESCRIPTION OF THE MINOR DEFECT	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	COMMENTS
	- Efficiency of gas-fired turbogenerators. - Efficiency of the steam turbogenerator for each steam phase.				
571	The delivery of test protocol records for the TG control systems (TGI and TG2) is requested.	0.00	0.00	0.00	The closure activities for this MD do not represent an economic cost for the Parties.
TOTALS		8,606,640.51	475,824.12	881,548.94	

327. For purposes of the final assessment, it is important to note that, of the 48 Minor Defects identified in Table 10 above, the following Minor Defects are referred to as "Open" in the table preceding Table 10 in this document, which shows the status of the Minor Defects as of November 25, 2021, in accordance with GPS Expert Report II, its Appendix No. 1 and Exhibit A-100 attached to the Statement of Claim.

Status of Minor Defects as of November 25, 2021

MD No.	Status according to Empalme	Status according to CFE	Warranty Enforced	GPS I Conclusion as of February 05, 2021	GPS II Conclusion as of November 25, 2021
45	Open	Open		Open	Open
49	Open	Open		Open	Open
321	Open	Open		Open, pending rescheduling by CFE and Covid 19	Open
322	Open, admissible according to Empalme	Closed by CFE	YES	Open	Admissible, take into account the value in GPS Expert Report II
338	Open	Open		Open	Open
345	Open	Open		Closed, applies MD-329	Open
352	Open	Open	YES	Open	Open
353	Open	Open	YES	Open	Open
360	Open	Subsequent closure		Open	
399	Open	Open	YES	Open, RPP	Open
416	Open	Open		Open, RPP	Open
436	Open	Open	YES	Open	Open
437	Open	Open	YES	Open	Open
448	Open	Open	YES	Open	Open
453	Open	Open	YES	Open	Open

457	Open	Open	YES	Open	Open
MD No.	Status according to Empalme	Status according to CFE	Warranty Enforced	GPS I Conclusion as of February 05, 2021	GPS II Conclusion as of November 25, 2021
474	Open	Open	YES	Open	Open
475	Open	Open	YES	Open	Open
487	Open	Open	YES	Open	Open
517	Open	Open	YES	Open	Open
532	Open	Open		Open	Open
535	Open	Open	YES	Open	Open
547	Open	Open	YES	Closed	Open
554	Open	Open	YES	Open	Open
556	Open	Open	YES	Open	Open
558	Open	Open	YES	Open	Open
559	Open	Open	YES	Open	Open
571	Open	Open	YES	Open	Open

* Abbreviations:

MD: Minor Defect

Warranty

Enforced: HSBC Letter of Credit

PFCoP: Cash Flow or Payment Issue

SCCC: No Collection on Letter of Credit

IRP: Impossibility of performing tests for reasons not attributable to Empalme.

328. As mentioned above and as both Parties have acknowledged, the Respondent enforced the HSBC Letter of Credit for the amount of USD \$13,627,892.00 dollars, currency of the United States of America,²²¹ and the Arbitral Tribunal has determined that such enforcement was in breach of the Contract for the reasons indicated above, therefore, by virtue of the blatant inadmissibility of the enforcement of the HSBC Letter of Credit, as well as the circumstances under which the enforcement occurred, it could be considered that the total amount for which the Respondent enforced the HSBC Letter of Credit, that is, the amount indicated above, constituted an excess on the part of the Respondent.

329. Notwithstanding the foregoing, when resolving the issues related to the enforcement of the HSBC Letter of Credit, the Arbitral Tribunal also ruled that such issues are independent of the admissibility of inadmissibility of the Minor Defects and the disputed Warranty Claims, as well as the issues inherent to the resolution thereof, which would be analyzed separately,

²²¹ CFE Official Correspondence No. 7B/2020/RJMN-00140, Exhibit A-022 to the Statement of Claim and Exhibit D-040 to the Statement of Defense. That official correspondence cites official correspondence No. DCIPI/CFE/062/2020, in which CFE "required the collection of that Guarantee in the amount of USD \$13,627,892.00 (Thirteen million, six hundred twenty-seven thousand, eight hundred ninety-two dollars)" and was not produced by either Party.

which has occurred.

330. Taking into consideration the positions and arguments of the Parties in accordance with their respective memorials, as well as the expert reports produced with those pleadings and the documents and circumstances on which the experts based their respective analyses and conclusions, and the other evidence found in the case file, including the transcript of the Hearing, after the analysis of all of the above, the Arbitral Tribunal determines and rules in the manner indicated in the following table with regard to the Minor Defects that have been left "Open" in accordance with the conclusions of the Claimant's expert contained in GPS Expert Report II, which were not challenged in the proceedings based on their subject matter, description, or amount.

Status of Minor Defects as of November 25, 2021 and Rulings

MD No.	Warranty Enforced	GPS I Conclusion as of February 5, 2021	GPS II Conclusion as of November 25, 2021	Decision of the Arbitral Tribunal	Value (USD)
45		Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	151,060.00
49		Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	3,488.43
321		Open, pending CFE rescheduling and Covid 19	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	10,080.00
322	YES	Open	It is appropriate to use the value provided in GPS Expert Report II	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	114,704.00
338		Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	9,525.00
345		Closed, MD-329 applies	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	17,939.61
352	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	178,726.61
353	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	1,338.20
399	YES	Open, RPP	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	7,429.43

MD No.	Warranty Enforced	GPS I Conclusion as of February 5, 2021	GPS II Conclusion as of November 25, 2021	Decision of the Arbitral Tribunal	Value (USD)
416		Open, RPP	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	6,870.80
436	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	59,591.03
437	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	29,795.51
448	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	4,500.00
453	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	4,500.00
457	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	142,478.55
474	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	8,131.83
475	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	8,218.60
487	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	5,607.38
517	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	9,369.18
532		Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	2,599.32
535	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	2,809.64
547	YES	Closed	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	2,809.64
554	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	9,201.64

MD No.	Warranty Enforced	GPS I Conclusion as of February 5, 2021	GPS II Conclusion as of November 25, 2021	Decision of the Arbitral Tribunal	Value (USD)
556	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	161.28
558	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	13,234.84
559	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	15,658.29
571	YES	Open	Open	The value of this MD is determined in accordance with Table 10 of GPS Expert Report II.	The activities required to close this MD do not represent an economic cost for the Parties.

331. Next, the Arbitral Tribunal will proceed to analyze Minor Defect MD-331, which merits a special analysis.

MD-331

Background Information

332. The Claimant has provided a special analysis with respect to case MD-331, derived from the amount represented by CFE's claim.²²² This MD deals with the high vibrations detected by CFE in the steam turbine bearing, which Empalme points out will be transitory during the startup or shutdown of the turbine; they were within the acceptable margins defined by the manufacturer, and did not cause any damage.

333. An individual analysis of MD-331 is justified, in fact, due to the special relevance that the Parties gave to the issue in their pleadings, and the presentation of a particular expert opinion or report, as well as the attention given to the matter during the Hearing. All of this is justified, of course, based on the value of the alleged Defect. According to the Claimant, the

²²² The claim totals \$19,977,969.18 Mexican Pesos and USD \$4,088,772.61, as detailed in the Camara Anzures Expert Report, ¶ 259.

Respondent has stated that it spent \$206,839,387.68 Mexican Pesos for the disassembly, dismantling and inspections of the Steam Turbine performed by CFE with the support of Doosan Skoda Power s.r.o ("Doosan Skoda") and/or Turbopartes y Servicios Especializados S.A de C.V. ("Turbopartes") with the proceeds from the enforcement of the HSBC Letter of Credit.²²³

334. According to CFE in its notice of Defect,²²⁴ this consists of:

"HIGH VIBRATION in bearing 2 of the TV, there are vibration values that exceed the alarm values in the speed increase (values 250 microns), and in the decrease it reaches values much higher than the trip value (values 400 microns), at speeds of around 1800 rpm.

"This is disputed. CFE argues that the values do not comply with the applicable standards, while EMPALME considers that the values are outside the scope of the Contract, since the rules that indicate the standard of values are subsequent to the signature of the Contract.

"In its analysis, GPS concludes that the standard referred to by CFE is subsequent to the one applicable at the time the Contract was signed, therefore it is outside the scope of the Contract, and should be considered to be closed."

CFE's Position

335. The Respondent argues that during the commissioning of steam turbine U3 of the Empalme I CC, it was detected during startup, increase and decrease of the turbine speed, that the vibration values registered in bearing No. 2, had exceeded 25% of the alarm limit established for the turbogenerator according to ISO 20816-2:2017;²²⁵ which it communicated to the Claimant beginning on May 12, 2018 that the vibration levels presented during the speed increases and decreases, and demanded a technical and written response from the supplier of the Doosan Skoda equipment, in order to ensure the reliability of the operation of the steam turbine.

336. According to the Respondent, again in the month of September 2018, it was observed, when performing a dynamic analysis of the TV turbogenerator, that the vibration values exceeded the alarm limits established by the manufacturer Doosan Skoda during the passage through the critical speed, as well as exceeding the limits established by ISO 20816-2:2017 for that critical speed, particularly in bearing No. 2 on the medium pressure rotor side.²²⁶

337. On the other hand, the Respondent states that the cost of resolving MD-331 *"... turned out to be more onerous than what was budgeted, due to the fact that findings were detected in responding to that Defect, mainly related to damage to the seals that implied higher expenses*

²²³ Cámara Anzures Expert Report, p. 31, Pre-Hearing Brief, ¶ 103.

²²⁴ Statement of Defense, ¶ 518.

²²⁵ Statement of Defense, ¶ 519.

²²⁶ Statement of Defense, ¶ 526

than those originally foreseen."²²⁷ It adds that, in response, the Claimant indicated that based on a communication from the manufacturer, the vibration values presented in the steam turbine complied with the ones stipulated in the contractually established ISO 7919 Standard,²²⁸ and that the equipment would be maintained to reduce the vibration levels.

338. When the Parties signed the Provisional Acceptance Certificate on March 26, 2019, they included a list of Minor Defects to be addressed by Empalme within sixty (60) days. This list included MD-331. The Respondent states that, without taking any action with respect to this defect, the Claimant requested closure arguing that the vibration values presented are in accordance with the contractual standard as indicated in the previous communication.²²⁹
339. Subsequently, in the month of June 2019, the Respondent informed the Claimant that "*... in the event of any damage to the steam turbine as a consequence of the high vibrations presented by the turbine, the latter will be held fully liable ...*".²³⁰
340. The Respondent contends that, since it did not receive a response from Empalme regarding the follow-up on MD-331 and its "intractable position" regarding resolution of the issue, the Commission proceeded to enforce the Performance Bond in accordance with the provisions of Clause 11.3 of the Contract.²³¹
341. In that regard, it argues that, at the time the HSBC Letter of Credit was enforced, the work required for the resolution of MD-331 would have only involved the balancing of the high pressure steam turbine during a scheduled shutdown in accordance with procedure No. MS-2018-012 "Method Statement" delivered by Empalme and issued by the manufacturer, Doosan Skoda.²³² Thus, it contacted that manufacturer in April 2020.
342. In April 2020, the Respondent requested that LAPEM (CFE's Equipment and Materials Testing Laboratory) perform a dynamic analysis of the steam turbine related to (i) differential expansion problems in the high pressure turbine (high pressure turbine rotor differential displacement), and (ii) high vibration present in the TV speed increase and decrease, and an imbalance was reported.²³³ Subsequently, on August 29, 2020, the Respondent made the

²²⁷ Statement of Defense, ¶ 210.

²²⁸ See Exhibits D-242 and D-245.

²²⁹ See communication No. CFE-P0M27039-C-EPCDP-CFE-0354. Exhibit D-245.

²³⁰ Statement of Defense, ¶ 537, referring to the CSPPS/CCEI-985/2019 Official Correspondence dated June 13, 2019 (Exhibit D-248).

²³¹ Statement of Defense, ¶ 545.

²³² Statement of Defense, ¶ 549.

²³³ See Exhibit D-261 - Report of Work Performed by Turbopartes TV.

decision to safely take the combined cycle turbine out of service in order to, according to the Respondent, prevent possible damage to the AP and MP steam turbine components derived from the axial displacement and vibrations, as well as to commence the rehabilitation and correction with technical assistance from the manufacturer (Doosan Skoda).²³⁴

343. The Respondent states that the work was performed beginning in October 2020, and upon disassembly of the rotor, damage was identified in the seal sheets in the interspaces as well as in the front and rear sections of the steam seals. LAPEM inspected "... *the horizontal joint bolts of the high and medium pressure outer casing, observing signs of corrosion on 8 bolts of the high pressure outer casing and on 21 of the bolts of the medium pressure outer casing, ruling that they should be rejected.*"²³⁵
344. In view of this situation, the Respondent hired Turbopartes to carry out work in the workshop and assemble the steam turbine, since this company, according to the Respondent, has a technological and commercial agreement with Doosan Skoda to carry out this type of work.²³⁶
345. Once the commissioning tests were performed, the Respondent indicates that the steam turbine returned to operation and the Power Plant was made available to CENACE, and that it has no longer presented vibrations outside of the standards.²³⁷
346. In CFE's Closing Memorial, the Respondent criticizes the Lapee Report, as it points out that it failed to conduct its own root cause analysis to determine whether the causes identified by third parties were sufficient, or whether there were other causes for a new turbine to present these vibrations, and additionally, a shaft displacement caused by severely damaged seals and what relationship existed between these phenomena.²³⁸
347. CFE concludes by pointing out that the Lapee Report omitted fundamental aspects that allow it to exclude liability, since, under the Contract, the Claimant is fully responsible for the "... *supply, transportation, assembly, commissioning and safekeeping of the Steam Turbine, therefore even if this damage had originated in the manufacture of the Steam Turbine, Empalme is fully and solely liable for the Axial Displacement issue*", adding that the Root Cause Report issued by Doosan Skoda states that the high vibrations were caused by various reasons during its assembly, and that the Claimant is responsible for this phase.²³⁹

²³⁴ Statement of Defense, ¶¶ 558-561.

²³⁵ Statement of Defense, ¶ 566.

²³⁶ Statement of Defense, ¶ 567, indicating that the Contract number is 800951583).

²³⁷ Statement of Defense, ¶¶ 576-579.

²³⁸ CFE's Closing Memorial, ¶ 99.

²³⁹ CFE's Closing Memorial, ¶¶ 101-102.

348. The Respondent did not submit any expert report or report in that regard but attached the Witness Statements of Engineers Ventura Sánchez Gutiérrez²⁴⁰ and Oswaldo Vera Sotelo,²⁴¹ who, it claims "*testified with regard to each (sic) of the facts described above, as well as the repairs made by Doosan Skoda.*"²⁴²

Empalme's Position

349. In its Statement of Claim, the Claimant pointed out that, contrary to the Respondent's contention, the values alleged by CFE are not in accordance with the applicable standards and are outside the scope of the Contract, since the standards that indicate the values are subsequent to the signature of the Contract.²⁴³
350. The Claimant's position is that the Parties and representatives of Doosan Skoda held a meeting on October 23, 2018 in which Doosan Skoda confirmed to CFE that the steam turbine complied with all applicable contractual and legal specifications and that the level of vibrations only warranted an alarm but did not reach a level that would prevent the proper operation of the Steam Turbine.²⁴⁴ It adds that, after that meeting, Doosan Skoda sent a letter to Empalme in which it expressly stated that "*the current status of the steam turbine and the generator will allow the full scope of operations without problems, [and is] reliable and valid for purposes of the Project*", as well as other similar letters confirming the point²⁴⁵ and that Empalme delivered copies of those communications to CFE.²⁴⁶
351. The Claimant points out that the Expert Chris Lappee conducted a detailed analysis of the report²⁴⁷ and concluded that: (i) CFE does not demonstrate damages that could have been caused by EMPALME since they would have been visible during the first weeks of October (a period for which there is no photographic evidence); and (ii) the report prepared by Turbopartes "... *contains inconsistencies and exaggerations fabricated to make it appear that the vibrations caused the damage claimed by CFE*".
352. On the other hand, the Claimant contends that in order to determine the "true cause" of the damage claimed by the Respondent, Doosan Skooda issued a new opinion in 2021 (*i.e.* subsequent to the activities carried out with CFE), which concluded that the true cause of the

²⁴⁰ Exhibit DT-001 to the Statement of Defense.

²⁴¹ Exhibit DT-002 to the Statement of Defense.

²⁴² Statement of Defense, ¶ 586.

²⁴³ Statement of Defense, ¶ 433.

²⁴⁴ Empalme's Pre-Hearing Brief, ¶ 106, citing the Witness Statement of Ved Pandit, ¶ 9-10 (Exhibit AT-004).

²⁴⁵ Empalme's Pre-Hearing Brief, ¶¶ 106-108.

²⁴⁶ Empalme's Pre-Hearing Brief, ¶ 109.

²⁴⁷ See Exhibit AP-003, Lappee Report, section 9 (Conclusions).

axial displacement is a leak that is not related to the high vibration level as CFE baselessly alleges.²⁴⁸

353. Notwithstanding the foregoing, the Claimant questions the participation of Doosan Skoda in the works as presented by CFE, since it indicates that CFE did not award a contract to that company until October 29, 2021, as stated in the accompanying document,²⁴⁹ which suggests, among other scenarios it presents, that CFE conducted the work it attempts to link to MD-331 without having a Root Cause Report; or that the Root Cause Report that CFE produced in this arbitration²⁵⁰ "*.. was not the definitive one or was prepared in a biased manner and under the instructions of CFE in an attempt to cover up CFE's deficiencies in the operation of the Steam Turbine and attempting to forcibly conduct the adjustments with MD-331, which as it has already been demonstrated are completely unrelated.*"²⁵¹
354. During the Hearing, the Claimant affirmed that although the Root Cause Report prepared by Doosan Skoda had been issued since March 11, 2021, CFE denied its existence during the document production process and did not deliver a copy to the Claimant until November 1, 2021, after it claimed it had been delivered.²⁵²
355. Therefore, Claimant concludes the that Respondent had the burden of proving that the alleged damage was caused by Empalme and, since it failed to do so, MD-331 should be considered to have been "Closed."²⁵³

Analysis of the Arbitral Tribunal

356. During the Hearing the Tribunal had the opportunity to hear the presentation of the experts appointed by the Parties to give their opinion on the subject, and the examination of their opinions and reports previously submitted during the proceedings:

- (a) Chris Lappee (CLUE Consultancy), February 17, 2022
- (b) Eng. José Lorenzo Cámara Anzures, on February 17, 2022.

²⁴⁸ Lappee Report, section 5.6, ¶ 225, in which he states that there is no correlation between the rotor vibrations and the negative axial displacement, therefore evidently MD-331 was not the cause of the axial displacement. ("*There is no correlation between the high relative shaft vibrations in the SV3-X probe and the negative axial displacement. So obviously MD -331 was not the cause of the negative axial displacement.*").

²⁴⁹ Exhibit A-106 - Doosan Award October 2021.

²⁵⁰ Exhibit A-103 - Doosan Root Cause Report dated March 11, 2021.

²⁵¹ Empalme's Pre-Hearing Brief, ¶ 113.

²⁵² LCIA 204661, 14-02-2022 (Part 1). See letter of October 4, 2021 sent by Empalme's representatives to the Arbitral Tribunal.

²⁵³ Empalme's Closing Memorial, ¶ 25.

357. The Tribunal identifies that, although the MD-331 reported by CFE to the Claimant during the month of December 2019, refers to a "high vibration in bearing 2 of the steam turbine", during the course of the proceedings the Respondent expanded its claim to affirm that this vibration had caused an axial displacement. Therefore, the Tribunal analyzes both issues in the subsequent sections, which the Respondent claims constitute MDs.

Vibrations

358. MD-331 is related to vibrations that occur exclusively during a transitory period in the process of increasing (*run up*) or decreasing (*run down*) the speed (*rpm's* or revolutions per minute) of the steam turbine -in particular, during the passage through the critical speed of 1,800 rpm- an issue that the Respondent acknowledges is eliminated once the turbine reaches stable operating speed.
359. When CFE notified the Claimant of MD-331 in October 2018, Empalme hired the turbine manufacturer (Doosan Skoda) to conduct an analysis of the reported vibrations and the effects it could cause. Thus, this company submitted a report²⁵⁴ in which it stated that "*the conditions of the turbine and generator would allow for a wide range of trouble-free operation, in a reliable and valid way for the purposes of the Project,*"²⁵⁵ adding that "*it considered that the operation of the steam turbine was fully capable [of operating] according to the specifications and requirements in terms of vibration.*"²⁵⁶
360. These representations were made again by Doosan Skoda in a subsequent communication of November 7, 2018, written in Spanish: "...[Doosan Skoda] represents that the current status of the steam turbine and generator will allow for the full scope of operation without problems, reliable and valid for the purposes of the project" and "[Doosan Skoda] as the manufacturer of the steam turbine considers that the operation of the steam turbine is fully capable in accordance with the contractual specifications and requirements in terms of vibration."²⁵⁷ The contractual specifications were satisfied.²⁵⁸
361. Again, on November 16, 2018 Doosan Skoda issued a report addressed to Empalme through which it confirmed its previous findings, and at the end concluded that, "*DSPW as the manufacturer of the steam turbine considers the operation of the steam turbine as fully capable in accordance with the contractual specifications and requirements in terms of vibration. The turbine is designed to withstand tripping at maximum turbine load although this is not a*

²⁵⁴ Exhibit D-242 to Statement of Defense - October 9, 2018 letter addressed by Doosan Skoda to Emplame.

²⁵⁵ "... the current status of the steam turbine and generator will allow trouble free full range of the operation, reliable, and valid for the purpose of the Project".

²⁵⁶ "[DPSW] considers operation of the steam turbine as a fully capable according to contractual specification and requirements in terms of vibration".

²⁵⁷ Statement of Claim, Exhibit AT-004, Exhibit 2

²⁵⁸ Statement of Claim, Exhibit AP-003, ¶ 98.

*normal operating condition.*²⁵⁹

362. Subsequently, and now at the request of CFE, Doosan Skoda conducted a “vibration root cause analysis” dated March 11, 2021²⁶⁰ -approximately a year and a half after the aforementioned communications- in which it reaches the following conclusions:²⁶¹

- (a) *"The turbine was delivered from the fabrication shop fully assembled, correctly aligned, inspected including relevant protocols and certificates. The turbine fully complies with the customer's requirements, the turbine vibrations at FSNL (Full speed and no load) or with any load was entirely in zone A as per ISO standard, as requested by the customer. Vibrations were only claimed (sic) for "run up" and "run down" however it is a normal behavior of the turbine during a transient mode of operations, passing the critical speed and the relevant standard does not specify any vibration values for such modes of operation and the turbine was manufactured according to best practices;*
- (b) *"The effect of the alleged vibrations during "run up" and "run down" originate for various reasons, primarily alignment for operation, final coupling or combination of all of the above. Given the facts presented in this document, we are of the expert opinion that the alleged vibrations resulted from reasons beyond the scope of DSPW, most likely due to assembly work performed by a third party"; and*
- (c) *"After final and proper alignment performed by DSPW using its best quality practice, the turbine is running with significantly lower vibration values during "run up" and "run down" thus confirming that the vibrations originated (sic) from the assembly works performed by third party".*

363. During the Hearing, the issue of the MD-331 was extensively debated by the Parties. No representative of the manufacturer was present, but since the Claimant had offered the expert report of Mr. Chris Lappee of CLUE,²⁶² he was called for examination. After making a presentation of his report, he was cross-examined in detail by the Respondent's representatives.

²⁵⁹ Exhibit DP-001, Exhibit 28.

²⁶⁰ Exhibit A-103 - Doosan Skoda, Final Technical Report - Root Cause Analysis, RCA-Spanish [11603].

²⁶¹ Exhibit A-103 - Doosan Skoda, Final Technical Report - Root Cause Analysis, RCA-Spanish [11603], p. 18.

²⁶² See Exhibit AP-003, Lappee Report.

364. In the Hearing, Expert witness Lappee stated that:²⁶³

- (a) increased vibrations while passing critical speed is a normal phenomenon of the equipment;
- (b) this phenomenon is calculated in the basic design phase;
- (c) the situation only occurs during speed increase and decrease (startup or shutdown) and is overcome within no more than 2 minutes;
- (d) there is no evidence of damage caused; and
- (e) there is no correlation between vibrations and axial displacement.

365. The Tribunal notes that, although the contractual limits are established based on a stable operating state, the manufacturer has confirmed that the vibrations that occur in the steam turbine during speed increase and decrease were acceptable and did not cause any damage to the turbine.

366. In addition, the Tribunal takes into account that Empalme timely proposed the balancing of the steam turbine during a scheduled shutdown according to procedure No. MS-2018-012 "Method Statement" issued by the manufacturer, Doosan Skoda, but CFE decided not to perform the work.

367. LAPEM's own reports commissioned by the Respondent indicated, based on ISO 20816-2:2017, that different limits were to be applied other than those adopted for stable conditions during startup, shutdown and overspeed, and that the limits were to be established based on experience during these circumstances with the particular equipment.²⁶⁴

368. In addition, the Tribunal notes that Doosan Skoda confirmed that, after a final alignment was performed, the steam turbine operates with significantly lower vibration values.

369. On the other hand, it is a fact that the MD-331, as timely reported by CFE to the Claimant, was restricted to the vibrations identified during the process of increasing (*run up*) or decreasing (*run down*) the speed of the turbine. No mention was made of axial displacement. It was not until later, when the steam turbine was serviced, that the cause of the displacement was identified, which turned out not to be the equipment vibrations at all.

²⁶³ See Exhibit AP-003 - Lappee Report, and CJM Lappee Hearing Presentation 20220217 1330WET, p. 2 and Transcript Day 4, Transcript 17-02-2022 (Part 1), p. 18.

²⁶⁴ See Exhibits D-2441 and D-246.

370. Since there is no correlation between the detected shaft vibrations and the negative axial displacement, the Tribunal concludes that these vibrations were not the cause of the axial displacement.

Axial Displacement

371. The negative axial displacement alleged by the Respondent is a separate issue. The Respondent pointed out that this is a differential expansion in the high pressure turbine (differential displacement of the high pressure turbine rotor), and that the Claimant is responsible. The fact is that this displacement eventually required "unavoidable" maintenance and rectification work.
372. Axial displacement occurs when the outer casing and rotor expand due to steam heating, however negative axial displacement occurs when the outer casing expands more than the rotor.
373. Doosan Skoda identifies the following possible causes in its Root Cause Report:²⁶⁵
- (a) a blow to the housing during handling, transport or assembly or other damage caused by a third party;
 - (b) incorrect steam parameters during turbine operation (such as inadmissible parameter changes or temperature trends caused by steam);
 - (c) incorrect steam purity (either mechanical and/or chemical) during operation, which could hinder the free movement of the rings and thus initiate cracks in the pipe due to thermal stress; and
 - (d) A combination of the above.
374. Doosan Skoda contends that the gradual increase in outer housing temperature "... *was caused by the damaged drain extension ... used to drain the lower tangential inlet ...*" of the turbine" and concludes that "*The root cause of the observed degradation of the AP rotor displacement was an increasing internal steam leak, due to a damaged drain extension pipe, from the bottom of the AP tangential inlet, increasingly (sic) affecting the AP outer casing temperature and causing its absolute expansion to increase accordingly.*"²⁶⁶

²⁶⁵ Exhibit A-103 - Doosan Skoda Final Technical Report - Root Cause Analysis, RCA-Spanish [11603], pp. 8-9.

²⁶⁶ Exhibit A-103 - Doosan Skoda Final Technical Report, *idem*, p. 9.

375. The Doosan Skoda Report is not disputed by the Parties. What is disputed is who is responsible for the steam leak. CFE argues that the various reasons stated by the manufacturer are attributed to acts during its assembly, and that this phase was the responsibility of the Claimant.
376. However, the Respondent has failed to prove that the damage was caused by the Claimant at the time the steam turbine was installed.

Resolution of Warranty Claims

Background Information

377. Warranty Claims (or WCs) are covered by Clause 20.1 of the Contract and are defined as Defects in the Works *resulting from the same, due to hidden defects, and any other liability incurred by [Empalme], under the terms set forth in this Contract and the Federal Civil Code*". The obligation to respond for such claims will remain in force *"for the duration of the Warranty Period."*²⁶⁷
378. Taking into account the procedure established in the Contract, the Claimant points out that on February 21, 2019 it delivered to CFE the Procedure for the Management of Warranty Claims for the Combined Cycle ("Warranty Claims Management Procedure")²⁶⁸ the purpose of which was to establish a procedure for the management of warranty claims related to the equipment and facilities for which the Claimant was responsible during the Power Plant Warranty Period.²⁶⁹ This document established the procedure for giving notice of the opening of WCs, the system to be used for the receipt and analysis of WCs, the resolution of the WCs and notification of their closure.²⁷⁰
379. The Claimant also clarifies that the WC Management Procedure specified that the warranty was limited in accordance with Clause 20.9 of the Contract and that it in no case applied to additional supplies and modifications in scope requested after the date of the issuance of the Provisional Acceptance Certificate.
380. In accordance with the WC Management Procedure, all WCs would be initiated through a letter sent by CFE to the Claimant's Warranty Officer, providing all the required

²⁶⁷ In its Statement of Claim, the Claimant clarifies that, pursuant to Clause 20.9 of the Contract, there are other items that are outside of the scope of the Operational Warranty, including Defects or Flaws in the Plant, Works or Materials caused by normal wear, improper operation or maintenance of the Plant, as well as negligence or unauthorized alterations to the Works or Materials. See ¶ 658.

²⁶⁸ Exhibit A-089, CFE-P0M27039-EPCP-PR-01230 PROCEDURE FOR MANAGEMENT OF FINAL CC WARRANTY CLAIMS.

²⁶⁹ Statement of Claim, ¶ 659.

²⁷⁰ CFE-P0M27039-EPCP-PR-01230, WC Management Procedure, pp. 6 and 7.

information/documentation, and requesting evaluation and resolution by Empalme using the corresponding form. Once the corresponding analysis had been carried out, the Claimant's Warranty Officer would determine whether or not the WC was justified and if the WC was justified, establish a proposed solution and resolution program, which had to be agreed upon with CFE. Subsequently, the repair would be carried out in the agreed manner.²⁷¹

381. Once the repair work and the corresponding inspections are completed, the CFE Warranty Officer will return the signed WC as "closed". In the event that CFE did not send the signed WC, the Claimant's Warranty Officer would send a communication closing the WC, and CFE could submit its observations to such closure during the following 14 Days.²⁷² However, as established in the WC Management Procedure, in case of no response from CFE, *"the WC will be considered to be closed."*²⁷³ That is, if CFE is silent, it would be considered to have been "automatically" closed.²⁷⁴ Therefore, the Parties to the Contract covered the possibility of two options for the closure of the WCs: (a) WCs "closed" by acts performed by the Parties, and (b) WCs with "automatic closure".
382. On the other hand, in the case of a WC that has been "automatically closed", the WC Management Procedure provides that: *"Upon rejection of a WC, CFE will have 7 days to respond in writing to the Contractor's disagreement. When the Contractor does not receive written notification within the period indicated, it will be interpreted as CFE's acceptance, therefore the WC will be definitively rejected."*²⁷⁵
383. Throughout the Warranty Period (and a subsequent term that the parties dispute), the Respondent submitted a total of 256 WCs.²⁷⁶

Empalme's Position

384. The Claimant emphasizes the WC Management Procedure that the Parties agreed to by incorporating reference to it in the Provisional Acceptance Report, thus it argues that the *"binding nature of the agreed WC Management Procedure is undisputed"*.²⁷⁷

²⁷¹ Statement of Claim, ¶ 660.

²⁷² Pursuant to the definition of "Day" in the Contract (Clause 1.1) means a calendar day. "Business Day", on the other hand, means for purposes of the Contract, *"any Day, except those considered as mandatory holidays by the Mexican Federal Labor Law or by labor agreements between the Commission and SUTERM"*.

²⁷³ WC Management Procedure, p. 17

²⁷⁴ Statement of Claim, ¶661.

²⁷⁵ Empalme's Pre-Hearing Brief, ¶119.

²⁷⁶ Exhibit A-100 (DM and WC Status Table)

²⁷⁷ Empalme's Pre-Hearing Brief, ¶115.

385. In that regard, the Claimant adds that CFE disregards the contents of the WC Management Procedure by not understanding the scope and definition of what constitutes a WC, both under the Contract and under the WC Management Procedure. Furthermore, the Claimant accuses the Respondent of failing to issue any pronouncement on the cases in which the definitive rejection of the WCs was actualized, as well as the reasons why the automatic closure of the WCs under that category would not be appropriate.²⁷⁸
386. Empalme points out that the Respondent is attempting to turn the debate on these WCs into a technical one, when the reality is that, by virtue of the agreement of the Parties, the WCs are definitively closed or rejected regardless of their technical justification.²⁷⁹
387. The Claimant contends²⁸⁰ that, under the terms of the Contract, it was only obligated – during the Warranty Period - to resolve "Defects" resulting from hidden defects or liabilities it may have incurred under the terms of the Contract or the Federal Civil Code. Under the terms of Clause 1.1 of the Contract, "Defects" must constitute a *"fact, condition or event that affects a Work or part thereof, and that fully or partially causes or may cause such Work to fail to serve its purpose or function."*²⁸¹ In addition, such fact, condition or event must be the result of (i) hidden defects or (ii) breach by Empalme of a contractual obligation.
388. Another limitation on liability pointed out by the Claimant arises from Clause 20.9 of the Contract, according to which the Claimant shall not be liable, among other matters, for Defects *"caused by normal wear, improper or inadequate operation or maintenance of the Plant"*.²⁸²
389. In its Closing Memorial, the Claimant categorizes the WCs as follows:²⁸³
- a) Automatic closure and definitive rejection (a total of 68). Corresponding to those that would have been closed or rejected by EMPALME without CFE expressing its disagreement within the terms set forth in the WC Management Procedure. They should be considered "closed";
 - b) Rejected (a total of 85). These claims were rejected because they did not fit the definition of a WC under the Contract; that is, they were rejected because they did not

²⁷⁸ Empalme's Pre-Hearing Brief, ¶ 116.

²⁷⁹ Empalme's Pre-Hearing Brief, ¶ 116, and Empalme's Closing Memorial, ¶ 30.

²⁸⁰ Empalme's Pre-Hearing Brief, ¶ 122.

²⁸¹ The term "Defects" is thus defined in Clause 1.1 of the Contract.

²⁸² Empalme's Pre-Hearing Brief, ¶ 123.

²⁸³ Table attached as Exhibit A-100.

constitute a hidden defect or flaw or were repeated with another WC or MD. They should also be considered as "closed";

- c) Rejected subsequent to June 9, 2019 (a total of 79). Since they were submitted after the term of the Operational Warranty, these Warranty Claims are inadmissible and should also be considered "closed";
- d) Open (a total of 9). These correspond to work for which the Claimant accepts and have therefore been assessed in section 10.1.2 of GPS Expert Report II for closure; and
- e) Disputed (a total of 9). These correspond to Warranty Claims that the Claimant considers to be "closed", while CFE considers them to be "open".

390. The Claimant [states] that the claims for all rejected WCs is inadmissible since they did not comply with the applicable requirements under the Contract and the WC Management Procedure.

391. Furthermore, the Claimant points out that it provided as evidence the GPS Technical Analysis of Warranty Claims, which is part of GPS Expert Report II, attached thereto as Appendix No. 02.²⁸⁴ According to the GPS expert, CFE did not justify the origin of all of the WCs and in his report, the expert, Mr. Cámara Anzures, only analyzed 8 out of 82 WCs that CFE claims as "Open."²⁸⁵

Resolved and "Closed" Warranty Claims.

392. In its Statement of Claim,²⁸⁶ the Claimant states that 37 Warranty Claims were reported by CFE, which were resolved by the Claimant and that subsequently CFE expressly ruled on their closure. It includes the number, the official notice of closure, and the date thereof.²⁸⁷

"Rejected" Warranty Claims.

393. According to the Claimant, CFE attempted and still attempts to pass off as WCs issues that, on the one hand, do not constitute Defects or that, on the other hand, are related to normal use or wear of the Plant or to lack of proper operation and maintenance of the Plant. It argues that the Respondent was never able to prove how the alleged WCs it submitted were in any way derived from a hidden defect or from the breach of any obligation by the Claimant and, by

²⁸⁴ GPS Expert Report II, Appendix GPS-02 and Exhibit A-089.

²⁸⁵ See Transcript 17-02-2022 (Part 4), pp. 22 and 23. In addition, see Cámara Anzures Expert Report, Exhibit DP- 001, in ¶¶ 265 to 753 he analyzes MDs numbers 331, 375, 436, 437, 444, 489, 490, 515, 517, 542, 556, 558, 561, 562, and WCs numbers 17, 20, 21, 22, 24, 32, 36 and 73.

²⁸⁶ Statement of Claim, ¶ 664.

²⁸⁷ These WCs are numbers 11, 12, 13, 15, 16, 26, 30, 31, 33, 35, 35, 38, 39, 44, 46, 47, 48, 49, 51, 53, 54, 55, 57, 59, 61, 67, 78, 79, 86, 87, 106, 107, 109, 110, 114, 117, 124, and 175.

way of example, it cites WCs submitted by CFE that refer to requests for additional hoists that were not covered by the Contract, as well as additional platforms other than those that were confirmed or agreed upon during the engineering phase.²⁸⁸

394. The Claimant includes a list of 31 WCs that were subject to "automatic closure" since CFE did not submit objections within 14 Days after the Claimant classified them as such.²⁸⁹

WCs submitted outside the Warranty Period

395. The Claimant also rejects a significant number of WCs since it contends that they were submitted outside the Warranty Period, since, in its view, both the Warranty Period and the Operational Warranty expired on June 9, 2019, and Clause 20.1 provides that: "*the Contractor shall be obliged, throughout the applicable Warranty Period, to respond for the Defects resulting therefrom,*" which implies that the Claimant was not obligated to respond for WCs that were submitted after the expiration of the Warranty Period.²⁹⁰
396. In this third group, Empalme lists 79 Warranty Claims that it indicates were filed after the expiration date of the Operational Warranty, that is, they were filed after June 9, 2019, the date on which it argues that the Operational Warranty expired. Of that total, it lists 13 that were filed on June 22, 2019;²⁹¹ 17 on June 27, 2019;²⁹² 22 on June 29, 2019;²⁹³ while the remaining 26 were filed on July 22, 2019.²⁹⁴
397. However, regardless of the alleged expiration of the Operational Warranty, the Claimant adds that the vast majority of the WCs filed by CFE after June 9, 2019 would also be inadmissible, since they do not even have the necessary characteristics to be considered as a WC under the Contract, since they are issues that do not constitute "Defects" as such term was defined in Clause 1.1 of the Contract.²⁹⁵ In other words, they are not the result of Defects resulting from hidden defects or from Empalme's responsibilities under the Contract. However, Empalme does not clarify which of them fall within the category of being rejected for not constituting "Defects" and which do not.

²⁸⁸ Empalme's Pre-Hearing Brief, ¶ 124.

²⁸⁹ Statement of Claim, ¶ 668. The WCs in this group are 23, 25, 27, 28, 36, 37, 37, 41, 42, 56, 60, 62, 63, 64, 64, 65, 71, 74, 77, 80, 84, 85, 90, 92, 105, 1118, 120, 121, 129, 130, 131, 168 and 177.

²⁹⁰ Empalme's Pre-Hearing Brief, ¶ 127.

²⁹¹ WC numbers 178 to 190.

²⁹² WC numbers 191 to 208.

²⁹³ WC numbers 209 to 230.

²⁹⁴ WC numbers 231 to 256.

²⁹⁵ Empalme's Pre-Hearing Brief, ¶ 129.

WCs "Rejected for Various Reasons".

398. In a fourth category, Empalme includes WCs that were "rejected for various reasons." These include "repeated" WCs that were rejected because their description was included within other WCs or even within some MDs.²⁹⁶ These include those listed below:

Warranty Claims rejected "For Various Reasons".		
No.	Reason for rejection by Empalme	GPS Expert Report
14	The resolution of the situation described in the claim would be addressed through the resolution of MD 382.	The nature and substance of this WC technically corresponds to MD 392.
40	This claim does not consist of a WC as required by the Contract, and the issue was deemed to be the result of lack of maintenance.	Issues resulting from lack of maintenance and/or activities that are part of the normal operation of CFE.
43	This is corrective maintains work due to wear on finite parts of the equipment.	The work involved corrective maintenance
45	The situation described in this claim would be resolved with the resolution of MD 546.	Resolved through MD 546.
50	Building signage would be addressed in accordance with the list of MDs.	The signs and signage identified as missing were documented in the list of MDs through MDs 285, 316, 317 and 318.
52	The requested tests had already been performed and the corresponding records were included in the Testing and Commissioning Manual in the sections entitled CICLO, GVRC1 and GVRC2 officially delivered to CFE.	The requested tests had already been performed, the records thereof had been prepared, and the Testing and Commissioning Manual had already been delivered to CFE.
58	There were no issues with the Chemical Sampling and Analysis System, however CFE had to perform routine cleaning and maintenance in order to keep the system operational.	The fouling situation described by CFE only serves to demonstrate the lack of routine maintenance of the systems.
66	The installed platforms allowed manual manipulation of the valves during normal plant operation.	Manual manipulation of the valves during plant operation is possible using the installed platforms.

²⁹⁶ Empalme's Pre-Hearing Brief, ¶ 125

Warranty Claims rejected "For Various Reasons".		
No.	Reason for rejection by Empalme	GPS Expert Report
68	Rejected because it addressed two different contexts	CFE was urged to generate a WC for each claim, but CFE did not subsequently respond with any statement in that regard.
69	Two different claims were addressed, in addition to being required in GVRC1 to cover GVRC2 equipment.	CFE was urged to generate a WC for each claim, but CFE did not subsequently respond with any statement in that regard.
70	The claim in question would be addressed through the resolution of MD 534.	Resolved through the MD 534
72	It addressed two different claims that were not directly related and was asked to generate an WC for each.	CFE was urged to generate a WC for each concept.
75	It addressed two different contexts that were not directly related and asked to generate an RG with each one	CFE was urged to generate a WC for each concept.
76	The issue was caused by mishandling by CFE Generación personnel, which was reported and CFE personnel were instructed on the correct way to handle the rotameters.	The issue was caused by mishandling the rotameters.
81	It addressed two different claims that were not directly related and was asked to generate an WC for each claim	CFE was urged to generate a WC for each concept.
83	The response to and consequent suppression/resetting of alarms by the alarm system is part of the normal operation of the control panel, and failure to periodically update the response to these alarms constitutes deficient operation.	This is part of the normal operation of the plant, which is evidence of deficient operation by CFE.
88	This was not a warranty claim as defined in the Contract.	Accesses are not warranty claims or hidden defects.
89	Repeated with WC 45, and the response would be carried out through resolution of MD 546.	The response would be provided through resolution of MD 546.
91	This claim addressed two different contexts that were not directly related and a request was sent to generate a WC for each.	CFE was urged to generate a WC for each concept.

Warranty Claims rejected "For Various Reasons".		
No.	Reason for rejection by Empalme	GPS Expert Report
93	The issue of hoists was not a warranty claim or hidden defect, specifying that the issue of platforms and railings was closed in MDs.	MDs related to platforms and hoists were clearly documented in the list of MDs.
94	It consists of four different valves and a request was submitted to generate a WC for each.	CFE was urged to generate a WC for each concept.
95	The claim consists of four different valves and a request was submitted to generate a WC for each.	Repeated with WC 94, and CFE did not file any subsequent objection.
96	The claim consists of four different valves and a request was submitted to generate a WC for each.	Repeated with WC 94 and 95, and CFE did not file any subsequent objection.
97	The claim consists of four different valves and a request was submitted to generate a WC for each.	Repeated with WC 94, 95 and 96, and CFE did not file any subsequent objection.
98	Could not be categorized as either a MD or a WC.	The claim does not constitute either a MD or a WC and CFE did not file any subsequent objection.
99	Repeated with WC 93	Repeated with WC 93, and CFE did not file any subsequent objection.
100	The situation described above would be addressed through the resolution of MD 290.	The claims cannot be considered to be WCs because they are not a defect.
101	The WC had no technical support since according to IEEE 519 standard <i>"Recommended practice and requirements for harmonic control in electric power system"</i> the system was within the permissible values for the total harmonic distortion level.	There is no technical support for the claim since the system is within the permissible values for the level of total harmonic distortion of the voltage wave.
102	The WC had no technical support since according to IEEE 519 standard <i>"Recommended practice and requirements for harmonic control in electric power system"</i> the system was within the permissible values for the total harmonic distortion level.	There is no technical support for this claim since the system is within the permissible values for the level of total harmonic distortion of the voltage wave.
103	It addressed two different contexts that were not directly related and asked to generate an WC with each one	CFE was urged to generate a WC for each concept and CFE did not file any subsequent objection.
104	It addressed two different contexts that were not directly related and asked to generate an WC with each one	CFE was urged to generate a WC for each concept and CFE did not file any subsequent objection.

Warranty Claims rejected "For Various Reasons".		
No.	Reason for rejection by Empalme	GPS Expert Report
108	It is not liable, since the Warranty did not cover Defects or Flaws in the Plant, the Works or the Materials that were caused by normal wear, by improper or inadequate operation or maintenance of the Plant, by negligence or unauthorized alterations to the Works or Materials.	Not admissible because it is part of the normal operation of the plant, which evidences deficient operation by CFE.
111	A functional test of the system was successfully carried out, demonstrating for a continuous period of 48 hours that the production indicated by the Contract for the machine was adequate.	The production of the evaporator complies with the specifications and even the corresponding evidence is signed by CFE.
112	The alarm corrective actions sent as evidence were part of the operation of the equipment that corresponded to CFE.	The required action corresponds to the operator
116	The claim did not meet the definition of hidden defect nor was it a "Defect;" furthermore, the concept was not incorporated by the Parties as a MD in the corresponding list of the Provisional Acceptance Report.	The claim does not meet the characteristics of a hidden defect nor is it a "Defect".
119	The response to the situation described above was already included in MD 352	This claim is included in MD 352
122	Reflected in MD 215, so the repair and color matching work on the false floor of the control room had already been completed.	Considered as MD 215 and CFE did not file any subsequent objection.
123	The cleaning had been performed in the month of June 2018 and after that work it became a maintenance work.	The claim constitutes maintenance work that was the responsibility of CFE and CFE did not file any subsequent objection.
125	The disturbance recorder was already installed in cabinet 12BAY30, located in the electrical protection room.	The disturbance recorder exists, is installed and is part of the engineering of the Project.
126	The disturbance recorder was already installed in cabinet 12BAY30, located in the electrical protection room.	The disturbance recorder exists, is installed and is part of the Project engineering.
127	The air conditioning control for the package containing the TG2 excitation system operated in accordance with the philosophy described on the air conditioning controller plate.	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.

Warranty Claims rejected "For Various Reasons".		
No.	Reason for rejection by Empalme	GPS Expert Report
128	The air conditioning control for the package containing the TG1 excitation system operated according to the philosophy described on the air conditioning controller plate.	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
132	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
133	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
134	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
135	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
136	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
137	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
138	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
139	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
140	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
141	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
142	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
143	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
144	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.

Warranty Claims rejected "For Various Reasons".		
No.	Reason for rejection by Empalme	GPS Expert Report
145	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
146	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
147	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
148	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
149	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
150	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
151	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
152	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
153	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
154	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
155	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
156	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
157	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
158	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
159	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
160	The claim did not meet the definition of hidden defect since it did not consist of a	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent

Warranty Claims rejected "For Various Reasons".		
No.	Reason for rejection by Empalme	GPS Expert Report
	"Defect".	objection.
161	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
162	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
163	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
164	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
165	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
166	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
167	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
169	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
170	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
171	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
172	The claim did not meet the definition of hidden defect since it did not consist of a "Defect".	It is not a "Defect", hidden defect or malfunction; CFE did not file any subsequent objection.
173	When the filters are changed, the housing must be thoroughly cleaned to avoid leaving residue that could cause damage and, once the cleaning is finished, with the approval of Siemens personnel, the filter housing doors could be definitively closed.	The filters used were used or old filters and therefore it was normal for them to show physical damage after being disassembled.
174	The response to the situation described above was already included in MD 352	Already included in MD 352
176	This situation would be addressed through the resolution of MD 114.	Already included in MD 114.

“Disputed” Warranty Claims.

399. On the other hand, Claimant describes another category of WCs – those which are "disputed" – in other words, those that were accepted by Claimant for response, and on which the Parties have diverging opinions as to their correct or incorrect response by Empalme. These claims are listed below:

“Disputed” Warranty Claims		
No.	Reason for rejection by Empalme	GPS Expert Report
10	The recommendations mentioned by Doosan Skoda Power were implemented and a closure request was sent incorporating a letter from Doosan Skoda Power detailing the root cause of the event, causal factors, corrective actions implemented and actions to prevent the event from recurring.	CFE requested an additional root-cause analysis not included in the solution originally agreed upon and which was also mentioned by Doosan Skoda in the letter sent to CFE. Consequently, in the opinion of GPS, this WC should be considered to be closed.
17	The root cause of the low level in the pumping sump of the submerged water intake was identified as the reduction of the cross-sectional area of the intake pipe due to an obstruction, affecting the flow and generating low level alarms in the sump. The obstruction of the pipe was caused by the proliferation of "Biofouling" on the pipe walls.	The dosage of sodium hypochlorite specified by CFE was not correct, therefore it was not possible to prevent the formation and development of microorganisms on the pipe walls. In the opinion of GPS, this WC should be considered to be closed.
20	It was determined that it would be resolved during the plant shutdown scheduled on May 27, 2019. With the approval of Empalme's engineering personnel, the set point value was lowered in degree of overheating, since in previous startups the degree of overheating was reached without major objection.	CFE did not take into account that, in the Closing Form, it was stated that the modification to the <i>Set point</i> was approved by Empalme Engineering. In the opinion of GPS, this WC should be considered to be closed.
29	According to the Seawater Evaporator Vibration Analysis Report, there was wear in the bearings of the equipment, a situation that occurred after months of operation and constituted preventive maintenance. Although the WC was rejected from the beginning, Empalme agreed to change the bearings	The leak was not observed in the Empalme inspection and, consequently, in the opinion of GPS, this WC should be considered to be closed.

“Disputed” Warranty Claims		
No.	Reason for rejection by Empalme	GPS Expert Report
	and conduct maintenance on the unit and monitor vibration performance. However, CFE, noted an oil leak in the equipment.	
32	It was reported that the WC had been addressed by attaching trend graphs and requesting its closure. However, CFE rejected the closure stating that the evidence presented corresponded to the run-in stage while the problem occurred after synchronization.	It is evident from the records that the steam flow performance in both trains is balanced with respect to the generation after synchronization. Consequently, in the opinion of GPS, this WC should be considered to be closed.
34	A change was made in the programming to correct the error detected in the HMI of the GVRC1 dosing system, as well as the change so that the correct feedback of the status of each of the dosed chemicals (local mode, auto mode, remote mode) would be displayed on the main screen of the GVRC1 DQ system. In addition, the corresponding changes were verified in conjunction with CFE Generación and CPT personnel. However, CFE maintains that the fault persists, despite the fact that Empalme checked it again and did not find the fault.	The solution was verified jointly with CFE Generación and CPT, who expressed their conformity with the work performed. Consequently, in the opinion of GPS, this WC should be considered to be closed.
73	It was found that the settings loaded in the TCS were not the same as those used to validate the ASR tests. The settings validated by LAPEM during the AVR/ASR tests were restored and the TCS T3000 was reloaded. CFE rejected the closure of the WC, attaching as evidence graphs issued by CENACE with information that did not refer to the power plant systems.	The WC was resolved and the corresponding adjustments were made. However, CFE does not agree that the supplier found alterations in the equipment adjustment settings with respect to the adjustments with which the equipment was initially formally tested and validated. Consequently, in the opinion of GPS, the WC should be considered to be closed.
113	The porous spool was changed and all piping was cleaned. CFE rejects	The WC was resolved by changing a section (reel) and cleaning all the piping.

“Disputed” Warranty Claims		
No.	Reason for rejection by Empalme	GPS Expert Report
	the closure of this WC since it mentions that pipe replacement is required, as the root cause of the WC occurred on two occasions.	No evidence was found of subsequent leaks. Consequently, in the opinion of GPS, this WC should be considered to be closed.
115	The leak in the discharge channel was resolved by installing an elastic seal at the bottom of the channel, which was tested with all circulating pumps in operation without leaks. CFE rejected the closure of the RG due to the alleged persistence of the leaks in the cold joint.	The WC was resolved by installing an elastic seal on the bottom of the channel. Although CFE sent other notices stating that the leaks persisted, these were sent after the expiration date of the Operational Warranty. Consequently, in the opinion of GPS, this WC should be considered to be closed.

Recurring Warranty Claims

400. Regarding "Recurrences" of WCs that, despite having been closed -either automatically or by agreement between the Parties- the Claimant argues that CFE claims that these Warranty Claims must remain "Open" based on Clause 20.4,²⁹⁷ which the Claimant rejects, since it points out that, although it is obliged to resolve recurring events that occur during the year following the completion of the repair work for each WC, this applies exclusively to Warranty Claims that were resolved by Empalme and not those that were rejected or were resolved by CFE itself.²⁹⁸
401. In any event, the Claimant adds that, even though some of the recurring incidents indicated by CFE pursuant to Clause 20.4 were resolved, the truth is that, "... *in all the appropriate cases, CFE did not give notice of the corresponding recurrence until after the HSBC Letter of Credit was enforced. This means that CFE unilaterally decided to reopen Warranty Claims that were already closed (even by agreement of the Parties) and to charge arbitrary amounts for the supposed resolution of those claims. This occurred without Empalme being given the opportunity to verify whether there were indeed recurring events and, in any case, to resolve them.*" The Claimant also contends that the Respondent has provided no evidence in this arbitration to prove that the WCs in question corresponding to recurring events. Consequently,

²⁹⁷ This clause establishes that "the proper functioning of the Major Equipment or Materials to be repaired or replaced during the Warranty Period, as well as its lack of Defects or Flaws, shall be guaranteed by the Contractor to be free of Defects and/or Flaws for a period of 1 (one) year from the date of the repair or replacement in question."

²⁹⁸ Empalme's Pre-Hearing Brief, ¶¶ 138-139.

it is not appropriate to reopen the WCs under this criterion, much less to charge Empalme for the cost of the alleged work performed to resolve the claims.

402. In Empalme's Closing Memorial, the Claimant insists that, by giving notice of the alleged recurrences *after* the enforcement of the HSBC Letter of Credit, CFE deprived Empalme of the opportunity to verify the actualization and occurrence of recurrences and to resolve them, if appropriate.²⁹⁹

Open WCs

403. Finally, the Claimant provides a list of WCs for which it accepts responsibility and acknowledges that they should still be considered to be "Open". However, it indicates that the lack of resolution of these WCs has occurred for reasons not attributable to Empalme, namely: (i) failure to grant work permits; (ii) plant shutdown requirement; and (iii) failure to respond to quotes sent, matters that are the obligation of CFE under the Criteria for the Resolution of WCs.³⁰⁰

Open" Warranty Claims		
No.	Reason for rejection by Empalme	GPS Expert Report
18	After comments and revisions by CFE, Revision 6 of the Procedure was issued, with the purpose of verifying it during the performance of the Warranty Tests (Fifth Amendment Agreement). However, the test could not be performed for reasons beyond Empalme's control.	CFE was asked to share the hydrogen consumption corresponding to each of the Turbogenerator Units. CFE provided only a generic response, without the minimum level of detail required. Consequently, in the opinion of GPS, this WC should be considered to be "closed".
19	During the plant shutdown, the heat exchangers were cleaned as part of the maintenance tasks. To corroborate the temperature issue, the equipment supplier, Siemens, and Empalme agreed to verify the cooler logic on each of the skids to check that they were working properly. This test required requesting a work permit from CFE with the turbine online. However, this work permit was not granted, making it impossible to resolve this WC.	In the opinion of GPS, this WC should be considered to be "open".

²⁹⁹ Empalme's Closing Memorial, ¶ 29

³⁰⁰ Empalme's Pre-Hearing Brief, ¶ 141.

Open" Warranty Claims		
No.	Reason for rejection by Empalme	GPS Expert Report
21	Empalme requested a work permit for the resolution of this WC during a plant shutdown planned by CFE between March 7 and 9, 2020. However, no date was agreed upon for the work.	In the opinion of GPS, this WC should be considered to be "open".
22	The WC was accepted. However, the solution implied a plant shutdown with the purchase of certain elements that were not acquired.	In the opinion of GPS, this WC should be considered to be "open".
24	Empalme initially identified this claim as admissible. However, during a detailed evaluation, it was found that this situation occurred during startups in which excessive purging was performed to seek steam quality conditions in the shortest possible time. This implies that, under normal conditions, the situation should not occur if the startup curves are followed without attempting to purge excessively.	Since Empalme did not request the closure, despite the fact that the WC claim is out of scope since it involves abnormal operations, GPS considers that the WC should be considered to be "open".
82	Empalme initially identified this claim as admissible and announced that it would be resolved during a plant shutdown. However, after it was accepted, acceptance, Empalme considered that the event is part of the normal operation of the plant and should not have been accepted.	In the opinion of GPS this WC should be considered to be "open" since the WC was accepted.

404. Empalme adds that these "Open" WCs are valued in section 10.1.2 of GPS Expert Report II.³⁰¹

Warranty Claim WC-017

405. The Claimant includes a special analysis regarding WC-017, most certainly derived from the amount it represents.³⁰² This WC refers to the accumulation of marine biofouling (i.e., the adhesion of marine organisms to certain surfaces) in the submerged water intake, which, in turn, caused the intake pipe to collapse and affected the flow in the submerged water intake.

³⁰¹ The amount totals USD \$28,509.18.

³⁰² The claim totals \$19,977,969.18 Mexican Pesos and USD \$4,088,772.61, as outlined in the Camara Anzures Expert Report, ¶ 259.

406. The Respondent has argued that it is Claimant's responsibility to change the chlorine dosage for the treatment of the piping. However, the Claimant argues,³⁰³ on the contrary, that according to the H2O Expert Report,³⁰⁴ the root cause of the biofouling is found in the Project Specifications³⁰⁵ provided by CFE and that they were not effective in preventing it, and that the measures specified by the Respondent, such as ultraviolet rays or ozone, are not adequate and effective for seawater.³⁰⁶
407. The Claimant argues that its limit of liability was compliance with the specifications provided by CFE, and it adds that, although the Cámara Anzures Expert Report³⁰⁷ cites Clauses 4.2 and 4.3 of the Contract to support an obligation of Empalme, the reality is that the interpretation of those Clauses is erroneous, since they are limited to the "specifications" of the Contract, which the Claimant implemented and followed, and therefore CFE's error regarding the measures used to prevent biofouling cannot be attributable to Empalme.
408. In its Closing Memorial, the Claimant insists that the subject matter of the claim was the result of CFE's incorrect specifications regarding the dosage of sodium hypochlorite (which, in any case, Empalme implemented correctly), and that those specifications were ineffective in preventing the occurrence of biofouling.³⁰⁸
409. In that regard, the Claimant argues that the obligation to implement the specifications provided by CFE is derived from the Contract, as well as from the specifications themselves, which are established in a definitive manner, and the Claimant is not required to carry out additional studies that could modify the technical specifications.³⁰⁹
410. The Claimant distinguishes these specifications from "technical specifications" related to soil parameters and topography, which explicitly state that they contain a general report that would serve as a technical reference to be supplemented, detailed and confirmed according to the studies that the Contractor (that is, Empalme) would carry out. In that regard, it adds that it

³⁰³ Statement of Claim, ¶¶ 937-940.

³⁰⁴ GPS Expert Report I, Exhibit P088.

³⁰⁵ Project Specifications and Standards (Exhibit 2 of the Contract), (A-105)

³⁰⁶ Empalme's Pre-Hearing Brief, ¶ 133.

³⁰⁷ Cámara Anzures Expert Report, Exhibit DP-001

³⁰⁸ Empalme's Closing Memorial, ¶ 26

³⁰⁹ See Exhibit A-105 Project Specifications and Standards (Exhibit 2 of the Contract): "The seawater to be used as cooling water and for treatment of replacement water for the cycle, must be treated using a Hypochlorinator, [...] must be capable of producing in 3 hrs the solution required to provide shocks of 3 ppm of chlorine with a duration of 20 minutes per dosing point, for the total flow of circulating water. Per shift (8 hrs duration) the dosing to both points should be covered [...]. This equipment shall be fed by means of the seawater feed pumps."

should in no way be considered that it was the Claimant's responsibility to carry out additional studies without direct instructions from CFE.

411. The Claimant also refers to the statements made by Biologist Harry Polman -part of the GPS team- who stated during his appearance at the Hearing that making adjustments to the technical specifications would take time that a contractor would not have available during the first phase of a project such as the one that is the subject of the Contract.³¹⁰

CFE's Position

412. The Respondent argues that pursuant to Clause 20.1 (Operational Warranty), the Claimant was contractually obligated, throughout the applicable Warranty Period, to respond for Defects resulting therefrom, for hidden defects, and "for any other liability incurred under the terms of the Contract".³¹¹
413. In its Statement of Defense, the Respondent conducted a detailed exercise of each of the WCs that it filed during the term and during the Warranty Period. Thus, in paragraphs 944 to 1022 of its Statement of Defense it confirms those WCs that are "closed", and in paragraphs 1023 to 1364 it analyzed those that the Claimant states were "automatically closed", with the exception of 6 WCs (numbers 28, 71, 120, 129, 130 and 168).
414. Subsequently, the Respondent examines in paragraphs 1365 to 1432 those WCs that were rejected by Claimant for being presumably "submitted after the expiration of the Operational Warranty"; in paragraphs 1433 to 2135, those that are "Rejected for Various Reasons"; and in paragraphs 2136 to 2278, those referring to WCs that are "Disputed" by the Parties. Finally, in paragraphs 2279 to 2324 it analyzes the WCs that according to the Claimant are "Open".
415. In that regard, CFE stated that, as of June 9, 2021, 74 WCs were pending resolution.³¹²
416. In its Statement of Defense, CFE states that it includes a table that "... lists each of the Warranty Claims that the Claimant has failed to resolve."³¹³ Unfortunately, it did not include the table

³¹⁰ Empalme's Closing Memorial, ¶ 27.

³¹¹ Statement of Defense, ¶ 941

³¹² Statement of Defense, ¶ 939

³¹³ Statement of Defense, ¶ 943.

described. Although it is difficult to examine them in a consolidated format, the Tribunal has attempted to extract and analyze the claims described in the Statement of Defense.

WCs filed after June 9, 2019.

417. Following is a list of the 66 WCs filed after June 9, 2019, the date on which the Claimant argues that the Operational Warranty expired, and reference is made in the table as to whether, in CFE's opinion, they are still "Open" or "Closed". Those marked as "Closed" have been resolved (with a couple of exceptions) using CFE's own resources or using resources derived from the enforcement of the HSBC Letter of Credit. For easy identification, those that CFE considers to be "Open" are shaded.

CFE Warranty Claims - Filed After June 9, 2019		
No.	Work Condition	Status
187	Pending resolution by Empalme	Open
191	Resolved using proceeds from the Letter of Credit	Open
192	Resolved using proceeds from the Letter of Credit	Open
193	Resolved using proceeds from the Letter of Credit	Closed
Z194	Pending resolution by Empalme	Open
195	Pending resolution by Empalme	Open
196	Resolved using proceeds from the Letter of Credit	Closed
197	Resolved using resources from the Letter of Credit	Closed
198	Resolved using resources from the Letter of Credit	Closed
199	Resolved using resources from the Letter of Credit	Closed
200	Resolved using resources from the Letter of Credit	Closed
203	CFE's own resources were used to resolve the claim.	Closed
206	CFE's own resources were used to resolve the claim.	Closed
201	Resolution of Minor Defect MD-44	Closed
202	Resolution of Minor Defect MD-44	Closed

CFE Warranty Claims - Filed After June 9, 2019		
No.	Work Condition	Status
208	Resolved using proceeds from the Letter of Credit	Closed
204	Pending resolution by Empalme	Open
205	Pending resolution by Empalme	Open
207	Pending resolution by Empalme	Open
214	CFE's own resources were used to resolve the claim.	Closed
216	CFE's own resources were used to resolve the claim.	Closed
218	CFE's own resources were used to resolve the claim.	Closed
220	CFE's own resources were used to resolve the claim.	Closed
209	Pending resolution by Empalme	Open
210	Pending resolution by Empalme	Open
217	Pending resolution by Empalme	Open
211	Pending resolution by Empalme	Open
212	Pending resolution by Empalme	Open
213	Pending resolution by Empalme	Open
215	Pending resolution by Empalme	Open
219	Pending resolution by Empalme	Open
221	Resolved using proceeds from the Letter of Credit	Closed
222	Resolved using proceeds from the Letter of Credit	Closed
223	CFE's own resources were used to resolve the claim.	Closed
224	Resolved using proceeds from the Letter of Credit	Closed
225	Resolved using resources from the Letter of Credit	Closed
227	Resolved using resources from the Letter of Credit	Closed
228	CFE's own resources were used to resolve the claim.	Closed

CFE Warranty Claims - Filed After June 9, 2019		
No.	Work Condition	Status
229	Resolved using proceeds from the Letter of Credit	Closed
230	Resolved using proceeds from the Letter of Credit	Closed
231	Resolved	Closed
232	Resolved	Closed
233	Pending resolution by Empalme	Open
234	Resolved	Closed
235	Resolved using proceeds from the Letter of Credit	Closed
236	Resolved using proceeds from the Letter of Credit	Closed
237	Pending resolution by Empalme	Open
238	Partially resolved using proceeds from the Letter of Credit	Open
239	The Contract for the resolution of the claim was not awarded	Open
240	Pending resolution by Empalme	Open
241	Pending resolution by Empalme	Open
242	CFE's own resources were used to resolve the claim.	Closed
243	CFE's own resources were used to resolve the claim.	Closed
244	Pending contract award to resolve the claim	Open
245	CFE's own resources were used to resolve the claim.	Closed
246	CFE's own resources were used to resolve the claim.	Closed
247	CFE's own resources were used to resolve the claim.	Closed
248	Pending resolution by Empalme	Open
249	Pending resolution by Empalme	Open
250	Pending resolution by Empalme	Open
251	Pending resolution by Empalme	Open

CFE Warranty Claims - Filed After June 9, 2019		
No.	Work Condition	Status
252	Pending resolution by Empalme	Open
253	Pending resolution by Empalme	Open
254	No contract has been awarded to resolve the claim	Open
255	No contract has been awarded to resolve the claim	Open
256	Pending resolution by Empalme	Open

WCs "Rejected for Various Reasons".

418. Regarding the WCs that were rejected by the Claimant "For Various Reasons", the Respondent confirms cases that have been "closed", but clarifies that a significant number are still "Open" (shaded in the following table):

CFE Warranty Claims - Rejected "For Various Reasons".		
No.	Condition of work	Status
14	Minor Defect MD-392	Open
40	Satisfactory	In the process of being closed
43	WC resolved	Closed
45	Satisfactory	Closed
50	Satisfactory	Closed
52	Satisfactory	Closed
58	Resolved using proceeds from the Letter of Credit	Closed
66	Pending resolution by Empalme	Open
68	Pending resolution by Empalme	Open
69	Pending resolution by Empalme	Open
70	Duplicate claim	Closed
72	Duplicate claim	Closed

CFE Warranty Claims - Rejected "For Various Reasons".		
No.	Condition of work	Status
75	Resolved	Closed
76	Resolved using proceeds from the Letter of Credit	Closed
81	Pending resolution by Empalme	Open
83	The contract has not been awarded to resolve the claim.	Open
88	Pending resolution by Empalme	Open
89	Resolved using proceeds from the Letter of Credit	Closed
91	Duplicate claim	Closed
93	Duplicate claim	Closed
94	Pending resolution by Empalme	Open
95	Pending resolution by Empalme	Open
96	Duplicate claim	Closed
97	Duplicate claim	Closed
98	Pending resolution by Empalme	Open
99	Duplicate claim	Closed
100	Resolved	Closed
101	Duplicate claim	Closed
102	Duplicate claim	Closed
103	Resolved	Closed
104	Resolved	Closed
108	Duplicate claim	Closed
111	Pending resolution by Empalme	Open
112	An alarm occurred and the equipment tripped, leaving the Steam Turbine Oil Conditioner equipment out of service.	Open

CFE Warranty Claims - Rejected "For Various Reasons".		
No.	Condition of work	Status
	Resolved with the Doosan Skoda Contract.	
116	Resolved	Closed
119	Duplicate MD-352, pending resolution	Open
122	Duplicate claim	Closed
123	Duplicate claim	Closed
125	Pending resolution by Empalme	Open
126	Pending resolution by Empalme	Open
127	Resolved	Closed
128	Resolved	Closed
132	Pending resolution by Empalme	Open
133	Pending resolution by Empalme	Open
134	Pending resolution by Empalme	Open
135	Pending resolution by Empalme	Open
136	Pending resolution by Empalme	Open
137	Pending resolution by Empalme	Open
138	Pending resolution by Empalme	Open
139	Pending resolution by Empalme	Open
140	Pending resolution by Empalme	Open
141	Pending resolution by Empalme	Open
142	Pending resolution by Empalme	Open
143	Pending resolution by Empalme	Open
144	Pending resolution by Empalme	Open

CFE Warranty Claims - Rejected "For Various Reasons".		
No.	Condition of work	Status
145	Duplicate claim	Closed
146	Pending resolution by Empalme	Open
147	Pending resolution by Empalme	Open
148	Pending resolution by Empalme	Open
149	Pending resolution by Empalme	Open
150	Pending resolution by Empalme	Open
151	Pending resolution by Empalme	Open
152	Pending resolution by Empalme	Open
153	Pending resolution by Empalme	Open
154	Pending resolution by Empalme	Open
155	Pending resolution by Empalme	Open
156	Pending resolution by Empalme	Open
157	Pending resolution by Empalme	Open
158	Pending resolution by Empalme	Open
159	Pending resolution by Empalme	Open
160	Pending resolution by Empalme	Open
161	Pending resolution by Empalme	Open
162	Pending resolution by Empalme	Open
163	Duplicate claim	Closed
164	CFE's own resources were used to resolve the claim.	Closed
165	CFE's own resources were used to resolve the claim.	Closed
166	CFE's own resources were used to resolve the claim.	Closed
167	CFE's own resources were used to resolve the claim.	Closed

CFE Warranty Claims - Rejected "For Various Reasons".		
No.	Condition of work	Status
169	Resolved	Closed
170	Pending resolution by Empalme	Open
171	Pending resolution by Empalme	Open
172	Resolution of Minor Defect MD-356	Closed
173	Resolved	Closed
174	Pending completion	Open
176	Resolved	Closed

"Disputed" Warranty Claims.

419. With respect to the WCs that both Parties consider to be "Disputed", the Respondent indicates which of them have been "Closed", and those that are still "Open", but clarifies that all of them were resolved by the Respondent itself using resources from the enforcement of the HSBC Letter of Credit (with the exception of the claim corresponding to MD-356):

"Disputed" CFE Warranty Claims "Disputed".		
No.	Condition of work	Status
10	Torque increase of the driveshaft motor with speed variation (rpm) <i>Resolved using proceeds from the Letter of Credit</i>	Closed
17	The issue with the pumping sump was due to the proliferation of "biofouling" (biological accumulation of microorganisms) due to the hypochlorite dosage criteria specified in the contract. <i>Resolved using proceeds from the Letter of Credit</i>	Open, in the process of being closed
20	Simulation of the opening permission of the low pressure bypass (degree of overheating) since the instruments (TE 11/12LBA60CT001JT01) are installed in an incorrect location.	Closed

	<i>Resolved using resources from the Letter of Credit</i>	
29	Evaporator gearbox anomalies, derived from out-of-range vibration behavior. <i>In the process of being resolved using resources from the Letter of Credit.</i>	Open
32	Startup and synchronization of the Steam Turbine in the GVRC flow sharing control system. <i>Resolved using resources from the Letter of Credit.</i>	Closed
34	Resolution of Minor Defect MD-356	Closed
73	Frequency Regulation System does function properly. <i>In the process of being resolved using resources from the Letter of Credit.</i>	Open
113	Corrosion problems in the piping of the Tarnos Rotating Screen Cleaning System. <i>In the process of being resolved using resources from the Letter of Credit.</i>	Open
115	Leak in cold joint in seawater discharge channel wall (circulation water). <i>Resolved using resources from the Letter of Credit.</i>	Closed

Open" WCs.

420. Finally, the Respondent examines those Warranty Claims that Claimant states are "Open", and states whether they are still "Open" or have been "Closed" using proceeds from the enforcement of the HSBC Letter of Credit.

"Open" CFE Warranty Claims.		
No.	CFE Reasoning	CFE Opinion
18	Loss of hydrogen purity in the TG1 Electric Generator. <i>Resolved using resources from the Letter of Credit</i>	Closed
19	Parallel arrangement of the two heat exchangers (PHX) and the two fans. <i>In the process of being resolved using resources from the Letter of Credit.</i>	Open

21	Signals from medium pressure bypass temperature elements (degree of overheating). <i>Resolved using resources from the Letter of Credit.</i>	Closed
22	Recurrent simulation during TRAIN 1 or TRAIN 2 coupling. <i>In the process of being resolved using resources from the Letter of Credit.</i>	Open
24	Resolution to the recurring simulation of the intermittent purge tank temperature of GVRC 1 and 2 for opening the intermittent purge drain valve. <i>Resolved using resources from the Letter of Credit.</i>	Closed
82	Resolution of multiple alarms suppressed and present in the T3000 system, corresponding to TG 1 and TG2.	Open

Warranty Claim WC-017

421. Regarding WC-017, the Respondent mentions that it gave notice of this Warranty Claim beginning on April 29, 2019, related to the low level of the pumping sump for analysis and acceptance.³¹⁴
422. The Respondent points out that, in a meeting held on June 6, 2019, Empalme stated that the problem with the pumping sump was due to the proliferation of biofouling (biological accumulation of microorganisms) due to the hypochlorite dosage criteria specified in the Contract. CFE added that it expressed its complete disagreement with that statement and requested that Empalme prove that the biofouling problem did not occur beginning in the assembly stage until before the hypochlorite dosing system began operating, since during this period there Empalme provided no biocide agent to prevent such proliferation.
423. It adds that Clause 4 of the Contract includes obligations, both basic and implicit, and that in Clause 7.3.7.4. (Criteria for analysis and hydraulic design of the circulation water system) as well as specifically in Clause 7.3.7.4.5 (Submarine intake and discharge works) it is established that the Contractor must "*carry out the definitive studies that it considers necessary for the execution of the construction project ... which will serve as a basis for the design to be carried out, as well as for the scheduling of the construction stages*" and adds that it is also provided that "*Organic incrustations that may develop inside the piping, if any, must be taken*

³¹⁴ Statement of Defense, ¶ 2147

into account in the calculation of friction losses in piping."³¹⁵ Consequently, the Respondent argues that the Contractor is responsible to prevent and account for the phenomenon of biofouling in the design, construction and commissioning stages, ensuring that the Plant could be operated, managed and maintained in an efficient, safe and environmentally optimal manner, in accordance with the Contract Specifications.³¹⁶

424. The Respondent also argues that, from February 2017 to February 2018, when the hypochlorination system dosing began, no dosing was performed and no preventive actions were taken to avoid the proliferation of biofouling in the intake piping; Although CFE believes it is true Empalme conducted a biocide dosing through a temporary skid from June 2017 to January 2019, this was done only in the sections of the intake channel and pumping sump, and excluded the intake piping, and the latter was where the problem occurred involving the marine growth that obstructed the hydraulic section of the pipeline resulting in the lowering of the water level in the pumping sump.³¹⁷
425. It adds that, although the hypochlorination system and the dosage specified by CFE are adequate to control biofouling, this system is an accessory system to mitigate the problem, thus Empalme was responsible to prevent and take the biofouling phenomenon into account in the design, construction and commissioning stages, ensuring that the Power Plant can be operated, managed and maintained in an efficient, safe and ecologically optimal manner, in accordance with the Contract.³¹⁸
426. The Respondent also refers to the fact that Empalme left the Cathodic Protection of the marine pipeline pending, which was specified in MD-365, "*... which, although not specified in that case, is an additional measure.*"³¹⁹
427. Thus, nearly a year after notice of WC-017 was given and in view of the various statements made by Empalme in rejecting the claim, CFE has decided to exercise its contractual rights in terms of the collection of guarantees since "*... the aggravation of this Warranty Claim is a determining factor in the operation of the Empalme I and Empalme II power plants*", so it proceeded to collect the guarantees to resolve the claim.³²⁰

³¹⁵ Statement of Defense, ¶ 2153.

³¹⁶ Statement of Defense, ¶ 2155.

³¹⁷ Statement of Defense, ¶ 2199.

³¹⁸ Statement of Defense, ¶¶ 2160-2162, See Report of M. in G.A. Fátima Karmina Salas Salmerón, CFE's expert, Exhibit 109.

³¹⁹ Statement of Defense, ¶ 2168, referring to the 7B/2019/RJMN-00450 official correspondence dated October 22, 2019 (Exhibit D-720).

³²⁰ Statement of Defense, ¶¶ 2178 and 2201.

428. The Respondent adds that during the months of April and May 2021, the two plants, CC Empalme I and CC Empalme II, were operating jointly without problems of abatement and at different load levels, as well as all Circulation Water, Secondary Cooling Water, Evaporator Feed Water, Screen Washing Water systems, etc., in other words, all consumption that uses sump water were operating satisfactorily at 100% of their capacity without the sump abatement problem.
429. In its Closing Memorial, the Respondent criticizes the analysis made by the Claimant's expert -GPS- regarding WC-017, since it argues that it does not have marine biology studies,³²¹ since specialized studies are required to support whether or not the chlorination specification was sufficient for the development of the marine fauna in question.³²²
430. In its opinion, the Respondent argues that "[o]ne of the aspects that [GPS] failed to consider is that there was an absence of hypochlorination dosage as a control measure as of February 2017, when the intake piping was installed, ending in February 2018 -the date on which the first dosing occurred according to the system specified in section 7.9.1.1.1- with the result that it was already insufficient by that time, because the hypochlorination dosing is only a support to mitigate marine fouling in its larval phase, as indicated in the specifications, and it was evident that this biofouling phenomenon was going to occur due to the lack of timely intervention, for which it is fully responsible."³²³

WCs Resolved by the Respondent.

431. The Respondent's designated expert, Lorenzo José Cámara Anzures, quantifies the total amount of the WCs that were resolved by CFE using its own resources and using resources derived from the enforcement of the HSBC Letter of Credit at \$37,494,469.66 Mexican Pesos, and includes the following table in his Expert Report to identify which of the WCs were resolved using each resource.

³²¹ Transcript, day 02-16-2022, Part 2, page 32.

³²² CFE's Closing Memorial, ¶ 86.

³²³ CFE's Closing Memorial, ¶ 93.

WC	HSBC LETTER OF CREDIT	CFE Resources
10	2,857,580.24	
17	19,977,969.18	4,088,772.61
20	153,791.03	
21	230,871.03	
22	317,981.79	
24	2,700,304.65	
29	532,083.50	200,000.00
32	457,774.39	
36	496,754.89	
42	1,950,000.00	
58	550,000.00	
73	391,636.51	
76	80,625.52	
89	250,000.00	
112	168,092.96	
113	51,822.86	
115	12,632.40	
119	273,123.33	
120	17,926.42	
168	26,257.60	
174	273,123.33	
178	7,839.60	
179	7,839.60	
180	29,280.00	

181	29,280.00	
182	11,040.00	
183	11,040.00	
186	10,738.89	
189	166,256.02	
190	649,744.74	
192	9,218.55	
198	20,224.40	
199	28,882.98	
200	28,882.98	
208	60,022.01	
221	11,348.90	
222	9,794.00	
224	20,097.92	
225	6,726.00	
227	7,115.63	
229	13,000.00	
230	12,809.23	
235	16,000.00	
236	4,360.00	
238	243,380.84	
243	7 823.10	
245	6,300.00	
246	6,300.00	
Total:	33,205,697.05	4,288,772.61

432. It is noteworthy, however, that the expert does not evaluate the costs or review the reasonableness of the contracts signed by CFE for the resolution of the WCs, but simply states that: "... if the Tribunal believes it is necessary, the Commission shall prove such expenditures, through the presentation of contracts awarded and payments made to the corresponding contractors".³²⁴

³²⁴ Cámara Anzures Expert Report, Exhibit DP-001, ¶ 260.

433. In his Expert Report, Mr. Cámara Anzures points out that the amounts indicated in the above table are the costs reported by CFE in attending to the specific contracts awarded.³²⁵
434. It is equally noteworthy, however, that the WCs in the table that are "shaded" are WCs that the Respondent claims have been resolved using resources from the HSBC Letter of Credit or its own resources, but it keeps them on the list of "Open" WCs.

Analysis of the Arbitral Tribunal

435. The Tribunal considers that the starting point in considering this issue is Clause 20 of the Contract (Warranties and Warranty Period), since in this provision the Parties agreed on the basis of liability for the work to be performed by the contractor (Empalme).
436. Clause 20.1 (Operational Warranty) states:

"The Contractor warrants that the Works related to the Power Plant, once Provisional Acceptance of the Power Plant is achieved, will strictly comply with the Contract Specifications, and that they will be manufactured and performed in accordance with Industry Standards in a technically efficient and complete manner, as well as the continuity of the operation of the Works. During the Warranty Period, the Contractor may verify that the Plant is operated by the Commission in accordance with the Plant's operation manual. If any abnormality is found in the operation of the Power Plant, the Contractor shall inform the Commission in writing, and the Commission shall correct such abnormality. Notwithstanding the formal receipt of the Works, the Contractor shall be obliged, throughout the applicable Warranty Period, to respond for the Defects resulting therefrom, for hidden defects, and for any other liability it may have incurred, under the terms set forth in this Contract and in the Federal Civil Code. In the event of a dispute, the Parties shall hold an advisory committee meeting under the terms of Clause 8, in order to resolve the dispute; if the disagreement persists, the provisions of Clause 30.2 shall apply" [emphasis added].

437. In turn, Clause 20.9 (Warranty Limitations) provides:

"The Contractor shall not be liable for Defects or Defects in the Plant, the Works or the Materials which are caused by normal wear, improper or inadequate operation or maintenance of the Plant, negligence or unauthorized alterations to the Works or the Materials, with the exception of work carried out by the Commission or third parties in accordance with Clause 20.6." [emphasis added]

³²⁵ Cámara Anzures Expert Report, Exhibit DP-001, ¶¶ 257-258.

438. On the other hand, Clause 20.4 (Extension of the Warranty Period), imposes on the Contractor the obligation to guarantee for 1 year from the repair or replacement of any Defect or Flaw that has been repaired or replaced during the Warranty Period. This provision states:

"If the Power Plant cannot generate electric energy due to a Defect or Flaw, the applicable Warranty Period shall be automatically extended for a period equal to the time during which the Power Plant, or the corresponding part, cannot be used by the Commission. In addition, the proper functioning of the Major Equipment or of the Materials to be repaired or replaced during the Warranty Period, as well as its lack of Defects or Flaws, shall be guaranteed by the Contractor to be free of Defects and/or Flaws for a term of 1 (one) year from the repair or replacement in question. In this case, the Commission shall have the right to request from the Contractor, and the Contractor shall have the obligation to deliver, a letter of credit in a reasonable and sufficient amount to ensure the fulfillment of the warranty guaranteeing proper performance and freedom from Defects and Flaws in the Major Equipment or Materials repaired or replaced during the Warranty Period." [emphasis added]

439. The terms "Defect" and "Flaw" have the meanings attributed to them in Clause 1.1 (Definitions).

*"1.1 **Definitions.** For the purposes of this Contract, the terms listed in this Clause 1.1, when capitalized, shall have the meanings set forth below for each such term:*

*"**Defect**" means any fact, condition or event affecting a Work or part thereof, which does or may cause such Work to fully or partially fail to serve its purpose or function.*

*"**Flaw**" means an event which fully or partially limits the generating capacity, efficiency or operational safety of the Plant, with respect to the Contract Specifications and which, if not remedied may affect the optimal condition of the Plant."*

440. A factor that should also be taken into account is the processes established in the WC Management Procedure. As described in the Background Information section of this topic, this instrument establishes a process for dealing with WCs that is not only reasonable but indispensable in view of a project as complex as the construction and startup of the Power Plant, where a large number of personnel from each of the Parties was present at the site.

Therefore, the need was established for each Party to designate a "Warranty Officer", so that the communication between both Parties would be direct and constant with respect to any WC detected during the operation and maintenance of the Power Plant.³²⁶

441. Secondly, a protocol was necessary for the communication of all WCs by CFE to Empalme. Therefore, it was established that all the WCs "*would be initiated by means of an official correspondence addressed by CFE to [Empalme's Warranty Officer], requesting an evaluation and response from the Contractor*". For this purpose, a form was defined to be sent as an attachment. Empalme was then to "*determine whether the WC was appropriate or inappropriate and, if appropriate, to establish the action plan to be carried out*". In the event that a WC was rejected by Empalme, CFE could "*resolve it directly and if it was proven that it was the result of liability attributable to the Contractor, the latter would be obliged to reimburse the direct, justified and documented costs to CFE ...*"³²⁷
442. In order to ensure that there was a process for notification, management, resolution and follow-up of the WC, the Parties also agreed on a protocol that required a sequentially numbered coding of each WC. Once received by Empalme, it was required to respond within 48 hours and indicate one of four options: (i) accepted; (ii) pending information; (iii) pending investigation; or (iv) rejected.
443. If a WC was rejected, the CFE Warranty Officer would be required to respond and express its disagreement in writing to Empalme within the following 7 (seven) days. If no response was sent, "*... it will be interpreted as CFE's acceptance, thus the WC will be definitively rejected.*"³²⁸ However, if a WC was to be resolved by Empalme, then, once the corresponding work was done and the equipment was operating reliably and within the operating parameters, Empalme could send a communication closing the WC. Afterwards, CFE could "*... present its comments with regard to such closure during the following 14 days. If no response was received from the Client, the WC will be considered to have been closed.*"³²⁹
444. In view of the above, when analyzing any Warranty Claim or WC, the Tribunal must therefore take into account that it must include and meet all the contractually established requirements. In summary:

³²⁶ See section 6.1 of the WC Management Procedure.

³²⁷ Section 8.2 of the WC Management Procedure.

³²⁸ Section 8.3.2 of the WC Management Procedure.

³²⁹ section 8.3.4 of the WC Management Procedure.

- a) Must occur and be notified during the Warranty Period;
- b) It must be a "*fact, condition or event affecting a Work or part thereof, which renders or is likely to render such Work incapable of fully or partially serving its purpose or function* ", as well as a hidden defect or other liability under the Contract and/or the Federal Civil Code;
- c) Excluded claims are those caused by normal wear or by improper or inadequate operation or maintenance of the plant; and
- d) The procedure for Management of WCs must be followed.

445. If any WC submitted by the Respondent does not meet these requirements, the Tribunal will be obligated to reject it.

446. The expert report provided by the Claimant³³⁰ includes the following table containing the status of the WCs as of January 14, 2021. It identifies those collected under the HSBC Letter of Credit and those that were not:

Table 14. Status of Warranty Claims as of January 14, 2021

STATUS	RESOLVED UNDER LETTER OF CREDIT	NOT RESOLVED UNDER LETTER OF CREDIT	TOTAL	%
CLOSED	1	36	37	14.98%
AUTOMATIC CLOSURE	12	13	25	10.12%
REJECTED	15	70	85	34.41%
ISSUED AFTER 09 JUN/19	39	40	79	31.98%
NO CLOSURE PROPOSAL	6		6	2.43%
CLOSURE REQUEST SUBMITTED		6	6	2.43%
REQUESTED WITH OBJECTION	9		9	3.64%
TOTAL	82	165	247	100.0%
%	35.2%	66.8%	100%	

447. Following is the Tribunal's analysis of the WCs in the different categories. We will first cover those that are rejected without further analysis for being untimely, repeated or covered by DMs.

WCs submitted outside the Warranty Period.

³³⁰ GPS Expert Report I, Exhibit P088.

448. The Tribunal has already ruled in a previous section of this Award that the Warranty Period expired on July 2, 2019 and not on June 9, 2019, as the Claimant argued.

449. Since the Respondent itself took the position that the Warranty Period expired on July 2, 2019, it is clear then that there are 16 (sixteen) WCs that the Respondent indicates are "Open" and should be considered to be inadmissible, simply because they were filed after the expiration date. These are the ones included on the following list:

WC	CFE's Position	Status	Date of Presentation
233	Pending resolution by Empalme	Open	July 22, 2019
237	Pending resolution by Empalme	Open	July 22, 2019
238	Partially resolved using resources from the Letter of Credit	Open	July 22, 2019
239	No contract has been awarded for the care of the	Open	July 22, 2019
240	Pending resolution by Empalme	Open	July 22, 2019
241	Pending resolution by Empalme	Open	July 22, 2019
244	Contract has not been awarded	Open	July 22, 2019
248	Pending resolution by Empalme	Open	July 22, 2019
249	Pending resolution by Empalme	Open	July 22, 2019
250	Pending resolution by Empalme	Open	July 22, 2019
251	Pending resolution by Empalme	Open	July 22, 2019
252	Pending resolution by Empalme	Open	July 22, 2019
253	Pending resolution by Empalme	Open	July 22, 2019
254	No contract has been awarded for the care of the	Open	July 22, 2019
255	No contract has been awarded for the care of the	Open	July 22, 2019
256	Pending resolution by Empalme	Open	July 22, 2019

WCs that were Duplicated or Resolved as Minor Defects.

450. Nineteen (19) WCs which were found to be duplicated, which GPS points out were acknowledged by the Respondent in its Statement of Defense, should also be rejected: These are WC-034, WC-062, WC-063, WC-089, WC-091, WC-093, WC-096, WC-097, WC- 099, WC-101, WC-102, WC-108, WC-122, WC-123, WC-145, WC-159, WC-163, WC- 201, WC-202.³³¹
451. Likewise, the 11 (eleven) WCs that were resolved by the Claimant as "Minor Defects" or MDs must be rejected. This group includes:

14	Resolved through MD-392.
45	Resolved through MD-546.
50	Resolved through the following MDs: MD-285, MD-316, MD-317 and MD-318.
70	Resolved through MD-534.
89	Resolved through MD-546.
119	Included in MD 352
122	Resolved through MD-215.
172	Resolved through MD-356.
174	Resolved through MD-352.
176	Resolved through MD-114.
203	Resolved through MD-287.
228	Resolved through MD-287.

452. The remainder of the WCs can be divided between: (a) those that the Respondent considers to be "Open" and (b) those that are "Closed". Within the latter, i.e., those that CFE considers to be "Closed", the Claimant identifies that some of them were closed using resources from the improper enforcement of the HSBC Letter of Credit.

³³¹ See GPS Expert Report II, Exhibit A-100 (MD and WC Status Table).

WCs that do not constitute "Defects" or Hidden Defects

453. The Tribunal has analyzed and rejects WCs that do not constitute a "Defect", "Flaw", a hidden defect or other liability under the Contract and/or the Federal Civil Code.
454. The following list includes 31 (thirty-one) WCs whose common denominator -which constitutes the reason for rejection- is that they are items (platforms) excluded from the scope of the Contract. The GPS Expert Report examines all of them and concludes that the platforms were not part of the contracted engineering. That is, they were not malfunctioning equipment or "defects" for which Empalme was liable.³³² The Respondent had an opportunity to object to the Claimant's original June 11, 2019 rejection, but failed to do so in a timely manner:

No.	Nature of the WC	Analysis
132	Installation of a platform to access the minimum flow control valve of GVRC 1 Medium Pressure Feedwater Pump "A".	Does not correspond to a WC
133	Installation of a platform to access the minimum flow control valve of GVRC 1 Medium Pressure Feedwater Pump "B".	Does not correspond to a WC
134	Installation of a platform to access the minimum flow control valve of GVRC 1 Medium Pressure Feedwater Pump "A".	Does not correspond to a WC
135	Installation of a platform to access the minimum flow control valve of GVRC 1 Medium Pressure Feedwater Pump "B".	Does not correspond to a WC
136	Installation of a platform to access the control valve of the AP Temperature Control Feed Water.	Does not correspond to a WC
137	Installation of a platform to access the control valve of the AP Temperature Control Feed Water.	Does not correspond to a WC
138	Installation of a platform for access to the control valve of the PM Feed Water Temperature Control System	Does not correspond to a WC
139	Installation of a platform for access to the control valve of the PM Feed Water Temperature Control System	Does not correspond to a WC

³³² See GPS Expert Report II, Appendix No. 02 (GPS Technical Analysis Warranty Claims), pp. 72 to 120.

No.	Nature of the WC	Analysis
140	Installation of a platform to access the minimum flow control valve of the High Pressure Feedwater Pump "B".	Does not correspond to a WC
141	Installation of a platform to access the minimum flow control valve of the High Pressure Feedwater Pump "A".	Does not correspond to a WC
142	Installation of a platform to access the minimum flow control valve of the Medium Pressure Feedwater Pump "B".	Does not correspond to a WC
143	Installation of a platform to access the minimum flow control valve of the High Pressure Feedwater Pump "A".	Does not correspond to a WC
144	Installation of a platform to access the RH Cold flow divider valve to GVRC 1.	Does not correspond to a WC
146	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
147	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
148	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
149	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
150	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
151	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
152	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
153	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
154	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
155	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC

No.	Nature of the WC	Analysis
156	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
157	Installation of a platform for the maintenance and troubleshooting of motorized valves.	Does not correspond to a WC
158	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
160	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
161	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
162	Installation of a platform for the maintenance and troubleshooting of the motorized valve.	Does not correspond to a WC
170	Installation of a platform to attend to anomalies and maintenance of the in-line drain valve of the Low Pressure Bypass from GVRC 2 to the Atmospheric Tank.	Does not correspond to a WC
171	Installation of platform to access the Temperature Transmitter installed on the hot reheat drain line to atmospheric tank.	Does not correspond to a WC

455. On the other hand, there are 31 (thirty-one) other WCs that Respondent contends are "Closed" for work performed by CFE or contracted by CFE, for which the WCs were submitted within the Warranty Period (i.e., before July 2, 2019). Although in its written submissions the Claimant intended to reject them based on the fact that they were submitted after June 9, 2019, the GPS expert conducted an analysis of their origin, which is shared by the Tribunal.³³³

WC	Nature of the WC	Analysis
24	The temperature of the intermittent purge tank of the GVRC 1/2 has to be simulated for the opening of the intermittent purge drain valve.	CFE performed excessive purges without following the startup curves that correspond to normal conditions estimated by engineering, but Empalme did not request a formal shutdown.
178	Suction filters	Corresponds to preventive and predictive maintenance activities.

³³³ See GPS Expert Report II, Appendix No. 02 (GPS Technical Analysis Warranty Claims), pp. 72 to 120.

WC	Nature of the WC	Analysis
179	Suction filters	Corresponds to preventive and predictive maintenance activities.
184	Cleaning of the first and second compressor inlet wheel blades TG1	Corresponds to preventive and predictive maintenance activities.
185	Cleaning of the first and second compressor inlet wheel blades TG1	Corresponds to preventive and predictive maintenance activities.
186	Damaged insulation in TGI gas turbine body	Foreseeable wear situations and improper adjustment of parts and devices.
188	Moisture in medium voltage electrical room	Foreseeable wear situation
189	Pipelines with electrical traces without thermal insulation	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
190	Damper stem guide loose due to jamming in damper	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
192	The pressure gauge in question in the hydrogen cooling system of the TG2 electric generator lacks a measuring needle.	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
193	On both main and redundant cards of the 11CJP41 cabinet (protection) SIMATIC ET 200m/link cards with fault signal.	CFE does not substantiate that the event occurred while the Plant was under the responsibility of Empalme Resources from the Letter of Credit.
196	Fan rotation change SAM30AN001	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
197	Fan rotation change SAM30AN001	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
198	There are no isolation valves in the hydrogen dryer of the steam unit's electric generator.	Change not provided for in the contract. This is approved engineering
199	Corrosion-damaged panel of the FM200 firefighting system of the TG1 gas turbine enclosure.	Corresponds to preventive maintenance activities

WC	Nature of the WC	Analysis
200	Corrosion-damaged panel of the FM200 firefighting system of the TG2 gas turbine enclosure.	Corresponds to preventive maintenance activities
206	Leakage from lift pump shaft with constant runoff causing the floor to be impacted by oil	Leaks due to affected lubrication pump packings that should be replaced during maintenance activities.
208	Two hypochlorite leaks in the hypochlorinator system dosing piping.	Empalme is not liable for problems caused by biofouling inside the discharge pipes and in the chlorine dosing pipes.
216	Dirt on protection board CHA01 of TG2 electrical package	Corresponds to preventive maintenance activities
218	Damaged insulation in TGI gas turbine body	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
220	Tighten flange bolts on the side of the gas transition duct in TGI.	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
221	Lack of anti-corrosion coating in weld areas on the compressor of the TGI and TGII compressor.	Due to environmental conditions, corrosion processes are accelerated. Corresponds to preventive maintenance activities
222	Detached sheeting on air box wall at TGII	Does not correspond to a hidden defect, defect or warranty claim.
223	Damage adjustment nut screw	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
224	Removal of welded eyebolts on the TGI and TG II structure used for maneuvering during compressor installation is required since it is a risk.	It is common practice to keep hoisting points on major equipment for use during major maintenance work.
225	Welded angles in the TGI structure obstruct the passage of personnel	This should have been resolved by EMPALME during the construction stage, but it is not a hidden defect or flaw.
227	Poor lamination seal in air heating duct at TGI	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.

WC	Nature of the WC	Analysis
229	Lack of conduit of the multiconductor of control of the tv drive shaft control.	The warranty claim corresponds to an additional engineering design modification and not a Defect.
230	Oil found in steam turbine main tank marine ladder up and down line	Not a Defect or hidden defect.
231	Random high signals in dynamic pressure sensors 11MBM12EU001 and 11MBM12EU010 (LFD1 and HFD4 respectively).	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme.
232	HVAC #3 of TG1 electrical package is damaged, does not work and skips sequence	Corresponds to preventive maintenance activities

456. The following 4 (four WCs) were filed after June 9, 2019 but before July 2, 2019. Although GPS rejects them as "untimely" (which they are not), it nevertheless acknowledges in its Opinion that they constitute pending construction and therefore the Claimant is responsible to resolve them.

RG	Nature of the WC	Analysis
180	No adequate electrical <i>grounding</i>	Corresponds to pending construction. <i>Pending resolution by Empalme</i>
181	No adequate electrical <i>grounding</i>	Corresponds to pending construction. <i>Pending resolution by Empalme</i>
182	Missing grounds connected to coupling covers of the TG1 electric generator.	Corresponds to pending construction. <i>Pending resolution by Empalme</i>
183	Missing grounds connected to covers of TG2 electric generator couplings	Corresponds to pending construction. <i>Pending resolution by Empalme</i>

WCs that CFE considers to be "Open".

457. The Respondent has identified a list of 93 (ninety-three) WCs that it considers to be "Open."³³⁴ Of that total, 45 (forty-five) remain, once the following are deducted:

- a) 16 (sixteen) WCs that have already been rejected by the Tribunal since they were filed outside the Warranty Period that expired on July 2, 2019;
- b) 18 (eighteen) duplicate WCs;
- c) 10 (ten) WCs that were resolved as MDs; and
- d) 4 (four) WCs that the GPS Expert has acknowledged were admissible but had been rejected because they were submitted after June 9, 2019.

WC	Nature of the WC	CFE's Position	Empalme's Position
13	Fault in the local touch panel display of the AVR and SFC of the TG1.	Admissible according to clause 11.3 of the Contract. However, CFE has not awarded a contract to resolve the claim.	Resolved, untimely notice of recurrence.
14	Harmonic problems occurring during the startup of TG1 and TG2.	No contract has been signed to resolve the claim	Duplicated with MD-392. Not admissible
17	The pumping sump abatement issue was due to the proliferation of biofouling (biological accumulation of microorganisms) due to the hypochlorite dosage criteria specified in the contract.	Resolved using proceeds from the Letter of Credit	The problems presented are not attributable to Empalme, but rather to the incorrect chlorination specifications defined by CFE. Not admissible according to a specific analysis.
19	Heat exchangers cause control oil temperature of 50 °C in TG2, while in TG1 there is only one heat exchanger in service with a temperature of 40°C, this equipment is for 100 %.	Open	Empalme cleaned the exchangers and verified their operating logic, pending verification with the online turbine, an activity that was dependent on work permits from CFE, which were not granted. Pending closure

³³⁴ This list can be found in Exhibit A-100 - MD and WC Status Table.

WC	Nature of the WC	CFE's Position	Empalme's Position
21	The signals of the medium pressure bypass temperature elements (degree of overheating) are simulated.	Closed using proceeds from the Letter of Credit	The person in charge of CFE for WC management, (RCRG), directed the Empalme designee to manage the work with other CFE agencies, thereby diverting the sequence of responsibilities. Pending closure
22	Recurrent simulation during train 1 or train 2 coupling maneuvers.	In the process of being resolved using resources from the Letter of Credit.	The work required for the closure of this RG was not completed due to lack of coordination with CFE on the date it was to be performed during a plant shutdown. Pending closure
28	Steam Turbine Electrical Generator Disturbance Recorder defects		Empalme resolved the warranty claim and notified CFE using the closure form. Automatic closure due to lack of timely objections. Not admissible
29	Evaporator gearbox anomalies, derived from out-of-range vibration behavior.	In the process of being resolved using resources from the Letter of Credit.	Corresponds to preventive and predictive maintenance activities. Not admissible
40	Seawater supply pump power cables (open circuit) are degrading due to moisture from constant water leakage from seals.		These are foreseeable wear situations and deficiencies in the operation and maintenance processes. Not admissible
65	Damage to the actuator motor, motorized shut-off valve for level control of the low pressure dome of the GVRC #1 recuperator,	No contract has been signed to resolve the claim	Empalme resolved the warranty claim and notified CFE using the closure form. Automatic closure due to lack of timely objections. Not admissible

WC	Nature of the WC	CFE's Position	Empalme's Position
66	Installation of a platform to resolve anomalies and maintain motorized valves.	Pending resolution by Empalme	Not a hidden defect or flaw.
68	Installation of a platform to resolve anomalies and maintain motorized valves.	Pending resolution by Empalme	Not a hidden defect or flaw.
69	Installation of a platform to resolve anomalies and maintain motorized valves.	Pending resolution by Empalme	Not a hidden defect or flaw.
71	Commissioning of the TV brush wear monitoring system.	No contract has been signed to resolve the claim	Resolved in MD-183 and notified CFE using the closure form. Automatic closure due to lack of timely objections. Not admissible
73	Frequency Regulation System does not perform its function properly.	In the process of being resolved using resources from the Letter of Credit.	WC resolved. Not admissible
81	Channel the motor vehicle access road.	Pending resolution by Empalme	The WC presented two different situations, a channel and a rail for a hoist, which deviates from the purpose of the WC Management Procedure. Automatic closure due to lack of objections to the rejection within the deadline.
82	Response to multiple alarms suppressed and present in the T3000 system, corresponding to TG 1 and TG2.		Related to MD-444, resolved by CFE using letter of credit. Empalme sent CFE the cost of the work quoted by Schneider and received no response. Pending closure

WC	Nature of the WC	CFE's Position	Empalme's Position
83	Alarms corresponding to the emergency shutdown system in the TG2 gas control and shutdown valve.	Resolved using resources from the Letter of Credit	The problems that occurred derive from poor operation on the part of CFE (deficiency in CFE's operation due to failure to apply the reset for the alarms). Not admissible
88	Installation of platform to access the top of the chemical tanks for refilling.	Pending resolution by Empalme	Not a hidden defect or flaw. Not admissible
94	Rail and hoist required for lifting motorized valves	Pending resolution by Empalme	The additional installation of hoists and associated accessories for maintenance does not correspond to Flaws or hidden defects. Not admissible
95	Rail and hoist required for lifting of motorized valves	Pending resolution by Empalme	The additional installation of hoists and associated accessories for maintenance does not correspond to Flaws or hidden defects. Not admissible
98	A platform is required in order to be able to resolve anomalies and maintain the motorized valves.	Pending resolution by Empalme	The installation of platforms and associated accessories for maintenance does not correspond to a hidden Defect or flaw. Not admissible
111	Low evaporator production capacity (below 34 M3/Hour)	Pending resolution by Empalme	The evaporator complies with the performance required in the Contract. The problems that have occurred derive from poor operation by CFE. Not admissible

WC	Nature of the WC	CFE's Position	Empalme's Position
112	An alarm occurred and the equipment was tripped leaving the Steam Turbine Oil Conditioner equipment out of service.	The claim was resolved with the Dosan Skoda Contract.	The event corresponds to actions between the CFE operator and maintenance, so that preventive actions are taken to avoid the equipment going out of operation. Not admissible
113	Corrosion problems in the piping of the Tarnos Rotating Screen Cleaning System.	In the process of being resolved using resources from the Letter of Credit.	Automatic closure. Notice of recurrence given extemporaneously. Not admissible
125	Mount Disturbance Recorder to TG2 Excitation System	Pending resolution by Empalme	Disturbance recorders are installed according to the engineering and specifications of the equipment manufacturers. In addition, MD-416, MD-425 and MD-384 requesting verification and testing of equipment were resolved. Not admissible
126	Mount Disturbance Recorder to TG1 Excitation System	Pending resolution by Empalme	Disturbance recorders are installed according to the engineering and specifications of the equipment manufacturers. In addition, MD-416, MD-425 and MD-384 requesting verification and testing of equipment were resolved. Not admissible
129	Supply each unit substation panel with two back-up circuit breakers for future use.		The installation complies with specifications and is not a hidden Defect or flaw. Not admissible

WC	Nature of the WC	CFE's Position	Empalme's Position
130	Supply each unit substation panel with two back-up circuit breakers for future use.		The installation complies with specifications and is not a hidden Defect or flaw. Not admissible
174	Severe damage to its components, stem, movable seat, fixed seat and internal body (blows		Duplicated with MD-352, which is applicable. Should be considered to be closed.
187	Paint peeling on all the trim of the power plant	CFE's own resources were used to resolve the claim.	These are foreseeable wear situations. Not admissible
191	The thermostat corresponding to the mechanical package (LUBRICATION OIL) of the TG1 does not work properly.	No Contract has been signed. Resources from the Letter of Credit	These are foreseeable wear situations. CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme. Not admissible
194	Installation of scaffolding for access and to have a work area due to the lack of platform.	Pending resolution by Empalme	Not a hidden Defect or flaw. Not admissible
195	Installation of scaffolding for access and to have a work area due to the lack of platform.	Pending resolution by Empalme	Not a hidden Defect or flaw. Not admissible
204	Damage to the fm-200 firefighting system board heating system fan in the TG2 brush collector enclosure.	Pending resolution by Empalme. Resources from the Letter of Credit	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme. Not admissible
205	Damage to the fans and heating system of the FM-200 panel of the TG2 gas turbine enclosure.	Pending resolution by Empalme. Resources from the Letter of Credit	CFE does not substantiate that the event occurred while the plant was under the responsibility of Empalme. Not admissible

WC	Nature of the WC	CFE's Position	Empalme's Position
207	Runoff that forms oil droplets impacting the area of the gas turbine lubrication packs.	No Contract has been signed. Resources from the Letter of Credit	Corresponds to preventive maintenance activities. Not admissible
209	Failure in the combustor thermocouples of TG1	No Contract has been signed. Resources from the Letter of Credit	Duplicated with WC-064 Not admissible
210	Failure in the combustor thermocouples in TG2	No Contract has been signed. Resources from the Letter of Credit	Duplicated with WC-064 Not admissible
211	The control and power panel of the crane, in which the speed variators and electronics are located, as well as the radio control system, is not for outdoors, a NEMA 4 system is required.	Pending resolution by Empalme	The panel supplied complies with the specifications and requirements for outdoor operation. Not admissible
212	Access obstructed by fire protection piping to TG1 auxiliary transformer power and control panel.	Pending resolution by Empalme	The interference of fire system piping with access to the auxiliary transformer area at TG1 was known to the parties during the engineering phase and should have been modified, if applicable, during construction. Not a hidden Defect or flaw.
213	Access obstructed by fire protection piping to TG2 auxiliary transformer power and control panel.	Pending resolution by Empalme	The interference of fire system piping with access to the auxiliary transformer area at TG1 was known to the parties during the engineering phase and should have been modified, if applicable, during construction. Not a hidden Defect or flaw.

WC	Nature of the WC	CFE's Position	Empalme's Position
215	Failure of the connection breaker to perform the automatic load transfer by taking the load on 10bma12, which is losing loads such as the HVAC electrical and control building and the inverter isolation transformer.	Pending resolution by Empalme	Complies with the specifications, and does not correspond to any abnormality, flaw, malfunction or hidden defect, but is a condition that can be resolved by operating the system in accordance with the operating manual.
217	No solid floor without gaps in the battery bank of the TG2 electric package.	No Contract has been signed. Resources from the Letter of Credit	Corresponds to pending construction issues that should have been corrected in accordance with the quality control and assurance process. Not a hidden Defect or flaw.
219	Access by scaffolding is required to clean the filters of each combustor due to the lack of a platform.	Pending resolution by Empalme	The additional installation of hoists and associated accessories for maintenance does not correspond to Flaws or hidden defects.

458. The Tribunal notes that the WC Management Procedure provides that:

*"Upon rejection of a WC, CFE will have 7 days to respond to the Contractor in writing expressing its disagreement. When the Contractor does not receive written notification within the indicated term, it will be interpreted as CFE's acceptance, thus the WC will be definitively Rejected."*³³⁵

459. In addition, the Tribunal takes into account that, with respect to the "automatic closure" WCs, the Parties agreed that once the repairs had been completed, and if CFE had not issued a decision on the repairs or on the closure request sent by Empalme during the 14 Days following the request, *"the WC shall be considered to be closed."*³³⁶ The GPS expert listed those cases in which the Respondent did not issue a timely response to Empalme's closure request in accordance with the WC Management Procedure, or simply did not issue a response

³³⁵ WC Management Procedure, Section 8.2, third paragraph following the statement of that Section.

³³⁶ WC Management Procedure, Section 8.3, 4.

and then in the Statement of Defense determined that those WCs had not been resolved. A total of 31 (thirty-one) WCs fall within this category.³³⁷

460. There was also a similar procedure when, after a WC was resolved, the equipment was not put into service for reasons beyond Empalme's control. In these situations, the WC "*will be closed automatically*."³³⁸
461. It is true, as the Claimant argues, that instead of referring to or arguing about the appropriateness or inappropriateness of the automatic closure or the definitive rejection under the WC Management Procedure, the Respondent presented in multiple instances in its Statement of Defense an analysis and reasoning of a technical nature to justify its position for each of these WCs. In other words, it seeks to introduce an analysis in an attempt to justify its position when the parties had agreed to a procedure that, by failing to follow it, would have the consequence of automatic closure. If CFE had wished to provide an analysis regarding the fact that the resolution of the WC was inappropriate, it should have done so within the periods established in the WC Management Procedure. By failing to do so, as the document provides, it should be considered that "automatic closure" of the WC is appropriate.
462. Of the 45 (forty-five) WCs that the Respondent considers to be "Open", the Tribunal considers that 5 (five) are actually "Open" since they correspond to Defects or hidden flaws or other liabilities covered by the Contract. The remaining WCs are claims that were not covered because they were not contracted, are outside the scope of the specifications, do not constitute a Defect or hidden flaw, or are responsibilities that correspond to lack of maintenance or mismanagement by CFE.
463. The Tribunal concludes that the 5 (five) WCs in this category that are the responsibility of Empalme are:

No.	Warranty Claim Description
19	Heat exchangers cause control oil temperature of 50 °C in TG2, while in TG1 there is only one heat exchanger in service with a temperature of 40°C, this equipment are for 100%.

³³⁷ GPS Expert Report II, ¶¶ 101 and 102. See Table 6 (WC No Timely Response from CFE). These are Warranty Claims WC-013, WC-023, WC-025, WC-027, WC-028, WC-036, WC-037, WC-041, WC-042, WC-056, WC-060, WC-062, WC-063, WC-065, WC-071, WC-074, WC-077, WC-080, WC-084, WC-085, WC-090, WC-092, WC-105, WC-118, WC-120, WC-121, WC-129, WC-130, WC-131, WC-168.

³³⁸ WC Management Procedure, Section 6.1.b).

No.	Warranty Claim Description
21	The signals of the medium pressure bypass temperature elements (degree of overheating) are simulated.
22	Recurring simulation during coupling maneuvers of train 1 or train 2.
24	Resolution of recurring simulation of the intermittent purge tank temperature of GVRC 1 and 2 for the opening of the intermittent purge drain valve.
82	Resolution to multiple alarms suppressed and present in the T3000 system, corresponding to TG 1 and TG2.

464. These WCs are in addition to those that the Claimant's own expert acknowledges were admissible despite having been filed after June 9, 2019, but which the Tribunal deems to be within the Warranty Period due to the decisions set forth in previous sections of this Award.

No.	Warranty Claim Description
180	No adequate electrical grounding
181	No adequate electrical grounding
182	Missing grounds connected to TG1 electric generator coupling covers
183	Missing grounds connected to TG2 electric generator coupling covers

WC-017

465. Due to the amounts applied by the Respondent in the resolution of the WC-017 Warranty Claim, in addition to the interest presented by the parties in their briefs³³⁹ and expert reports,³⁴⁰ as well as the attention given to the issue during the Hearing, the Tribunal's decision warrants particular analysis.

³³⁹ Statement of Claim, ¶¶ 937-940, Empalme's Pre-Hearing Brief, ¶¶ 130-137, Empalme's Closing Memorial, ¶¶ 26-28, Statement of Defense, ¶¶ 2147-2210, CFE's Closing Memorial ¶¶ 86-94.

³⁴⁰ H2O Expert Report (AP-004), GPS Report II, Appendix No. 02 (GPS Technical Analysis Warranty Claims), Cámara Anzures Expert Report (Exhibit DP-001), and Report from Fatima Salas, CFE expert (Exhibit 109).

No.	Warranty Claim Description	Letter of Credit	CFE Resources
17	Low level is observed in the intake sump, even with the junction I condenser outlet boxes at 50% throttled, and the junction II condenser outlet boxes at 37%, operating low level alarm. data from Saturday, April 27 is attached in exhibit 3	\$19,977,969.18	\$4,088,772.61

466. In essence, the Respondent contends that, although the Contract specifications established a dosage of sodium hypochlorite in the inlet piping that carries water for the use of the Power Plant, the Claimant failed to carry out studies to prevent the biofouling phenomenon, which was its responsibility under the Contract. It also points out that the biofouling problem could well have been caused during the assembly phases and even before the start of operations, since there was no biocide agent to prevent it. In any case, it alleges that the Claimant should have installed cathodic protection for the marine pipeline, which was an additional, but unspecified, measure.
467. On the other hand, the Claimant argues that it was not its responsibility under the Contract to perform the studies, since CFE provided sodium hypochlorite dosage specifications that the Claimant, as the Contractor, was required to follow. In any event, it argues, it was Respondent itself that should have changed the dosage in the specifications under the terms of the Contract.
468. The Tribunal has considered the information in the case and concludes that the Specifications presented in the Contract were the ones that were followed by the Claimant. With the exception of a limited number of items,³⁴¹ there was no contractual obligation to review each and every one of the Specifications that CFE provided to the Claimant when the Contract was entered into.³⁴² Had such an obligation existed under the Contract, it would have been an enormous and onerous task for the Contractor, as it would have required questioning each and every one of the Specifications. It would have required redoing the analysis and engineering of the project to evaluate and judge every decision, whether relevant or minute. The time and cost that would have been required to perform such work was incompatible with the development of the project for the construction and commissioning of the Power Plant. This was the opinion of biologist Harry Polman, a GPS expert with 25 years of experience in

³⁴¹ The Contract established "technical specifications" related to soil parameters and topography, which *explicitly* stated that it was a general report that would serve as a technical reference to be supplemented, detailed and confirmed according to the studies that the Contractor would carry out.

³⁴² See Exhibit A-105, Project Specifications and Standards (Exhibit 2 of the Contract).

biofouling control, during his presentation at the Hearing, who pointed out that there would not even be time available for the Claimant to carry out these studies and complete the phases of the project.³⁴³

469. Therefore, to the extent that the Contract set forth specifications with which the Claimant (as the Contractor) was required to comply, and there was, by contrast, no express provision that imposed on the Claimant the obligation to analyze, evaluate, assess, and to judge and decide on all engineering and other issues for the construction and operation of the Power Plant (with the exception of limited instances), the Tribunal concludes that neither the obligation to review the specifications, nor the liability arising from the accumulation of biofouling in the inlet piping that carries water to the pumping sump, can be imposed on the Claimant.
470. The consequences of the incorrect specifications, such as the accumulation of marine life and consequent corrosion, cannot be imposed on the Claimant, since it was under no legal or contractual obligation to change the dosage of chlorine in the treatment of the pipes.
471. Although the Respondent suggested as a preventive measure the installation of cathodic protection for the marine pipeline by means of copper anodes,³⁴⁴ the H2O experts (Mr. Harry Polman and Dr. Brent Knox-Holmes) confirmed that this was not feasible for the pipeline in question, since it is only for uncoated metal piping (and the pipeline was coated with epoxy material), and any installation of such anodes on the outside of the pipeline (as had been suggested by the Respondent) would have no effect whatsoever. At the Hearing Dr. Knox-Holmes affirmed that: *"The cathodic protection system at EMPALME, would have had no influence on the inside of the inlet piping where the biological fouling was found."*³⁴⁵
472. Therefore, the Tribunal dismisses the admissibility of Warranty Claim WC-017.

³⁴³ Transcript 02-16-2022 (Part 1) Final, p.16, where he notes that *"During the first stage of a project, it is very difficult to adjust the chlorination dosage specifications, especially when they are very clear and precise in the plant specifications. Adjustment of these specifications needs to be made based on the specific local conditions, taking into account the local species. These required studies, tests and evaluations will take months to be able to conclude what type of dosing regimen would be sufficient to prevent the settlement and growth of biological fouling in the seawater system at a specific location. The required capacity of the chlorination system to produce hypochlorite could only be calculated after these studies are completed. Furthermore, it should be taken into consideration that acquiring an electro-chlorination unit involves a long process. The delivery of an electro-chlorination unit normally takes twelve months, after the exact specifications have been agreed upon. All of the above signifies that there is not enough time to make these adjustments in the first phase of a project."*

³⁴⁴ See report CFE-POM27039-INCA-IN-1018 submitted by CFE by means of official correspondence No. 7B/2019/RJMN-00450 dated October 22, 2019.

³⁴⁵ Transcript 02-16-2022 (Part 1) Final, pp.13-14,

Valuation of the WC's

473. GPS Expert Report II examines the valuation of the WCs that it considers to be "Open."³⁴⁶ In examining the valuation, it states that it reviewed the information contained in the Statement of Defense and the summary table of values of the WCs included in the Expert Report of Mr. Cámara Anzures. GPS adds that the valuation was performed in Mexican pesos and US dollars according to the date on which the Respondent enforced the HSBC Letter of Credit, i.e. March 12, 2020.³⁴⁷ It includes detailed information on the valuations of the WCs in Appendix GPS 12 of GPS Expert Report II.

Open" Warranty Claims			
No.	Amount in MXN	Amount in USD	GPS Comments
19	\$3,328.00	US\$156.88	CFE did not include any cost support in its Statement of Defense. The amount of the estimate of the initial GPS Expert Report was maintained for the valuation of this WC.
21	\$59,600.48	US\$2,809.62	The support for the cost to close this WC presented by CFE corresponds to the invoice submitted by Edilberto Martinez and SEPIEC S.A. de C.V. which is unrelated to the description of the WC. The closing price included here corresponds to the quote submitted by LOSNOGA to Empalme. ³⁴⁸
22	\$150,600.06	US\$7,099.42	The support for the cost to close this WC presented by CFE corresponds to the invoice submitted by Edilberto Martinez and SEPIEC S.A. de C.V. which is unrelated to the description of the WC. The closing price included here corresponds to the quote submitted by LOSNOGA to Empalme. ³⁴⁹

³⁴⁶ GPS Expert Report II, ¶ 237.

³⁴⁷ GPS indicates that the conversion rate as of March 12, 2020 is used for the portion in Mexican pesos, at the exchange rate of 21.2130 MXN/USD, established by Banco de México.

³⁴⁸ GPS points to Exhibit GPS-216, Economic Support WC-021 as support.

³⁴⁹ GPS points to Exhibit GPS-217, Economic Support WC-022 as support.

Open" Warranty Claims			
No.	Amount in MXN	Amount in USD	GPS Comments
24	\$168,500.67	\$7,943.27	The support for the cost to close this WC presented by CFE corresponds to the invoice submitted by Edilberto Martinez and SEPIEC S.A. de C.V. which is unrelated to the description of the WC. The closing price included here corresponds to the quote submitted by LOSNOGA to Empalme. ³⁵⁰
82	\$222,736.13	US\$10,499.98	The support for the cost to close this WC presented by CFE corresponds to the invoice submitted by Edilberto Martinez and SEPIEC S.A. de C.V. which is unrelated to the description of the WC. The closing price included here corresponds to the quote submitted by LOSNOGA to Empalme. ³⁵¹
180	\$29,280.00	US\$1,380.29	This corresponds to pending construction work that was not closed and should have been addressed by Empalme.
181	\$29,280.00	US\$1,380.29	This corresponds to pending construction work that was not closed and should have been addressed by Empalme.
182	\$11,040.00	US\$520.44	This corresponds to pending construction work that was not closed and should have been addressed by Empalme.
183	\$11,040.00	US\$520.44	This corresponds to pending construction work that was not closed and should have been addressed by Empalme.
	\$604,765.34	US\$28,509.18	Total

474. It is important to note that CFE enforced the HSBC Guarantee to resolve the first four WCs indicated on the above table.

³⁵⁰ GPS points to Exhibit GPS-218, Economic Support WC-024 as support.

³⁵¹ GPS points to Exhibit GPS-219, Economic Support WC-082 as support.

475. Expert witness Lorenzo José Cámara Anzures states in his opinion that CFE enforced the HSBC Letter of Credit to allocate resources for the resolution of the aforementioned WCs.³⁵²
476. The Tribunal accepts the valuation proposed by the GPS expert, due to the absence of values presented by the expert appointed by the Respondent, in addition to the fact that, as can be observed, the costs stated by the Respondents in several cases do not even correspond to the description of the corresponding WC, or simply did not justify the cost reported to have been incurred.
477. It is revealing to note that the values identified by CFE for the resolution of the WCs (and also for the MDs) are - as identified by the GPS expert in its Report - "*... well above market values or the description of the works in the supporting document provided by CFE does not correspond to those required for the corresponding closure WC.*"³⁵³ GPS Expert Report II provides an analysis containing the above conclusions and presents the following table with different examples providing evidence thereof to evidence it:

Open" Warranty Claims			
No.	Nature of the WC	CFE Quote	GPS Comments
10	Increase in the torque of the TV driveshaft motor since it was 56 rpm (driveshaft speed).	Quote from Doosan Skoda in the amount of \$2,857,580.24MXN	Empalme obtained 2 quotes. The lowest quoted value corresponds to ICISA, in the amount of \$128,664.85 MXN.
20	Simulation of the opening permission of the low pressure bypass (degree of overheating), since the instruments (TE / 11/12LBA60CT001JT01) are installed in an incorrect location.	Quote for \$153,791.03 itemized as follows: ESP-C001 for \$9,423.08 MXN ESP-C002 for \$12,266.00 MXN ESP-C005 for \$97,266.70 MXN ESP-C013 for \$10,303.26 MXN	Empalme obtained 2 quotes. The lowest quote was from LOSNOGA, for \$168,500.67 MXN. In any case, the expert points out that the activities indicated in CFE's quote are unrelated to the WC.

³⁵² Cámara Anzures Expert Report, Exhibit DP-001, ¶ 259.

³⁵³ GPS Expert Report II, ¶ 240

		ESP-C017 for \$12,266.00 MXN ESP-C018 for \$12,266.00 MXN Total of \$153,791.03 MXN	
40	Seawater supply pump power cables (open circuit) are degrading due to moisture from constant leakage of water from the pump seals.	CFE does not include a valuation in its Statement of Defense for the closure of this WC.	Empalme obtained 2 quotes. The lowest quoted value corresponds to In Time Control for \$133,641.31 MXN.
112	Alarm and tripping of the equipment leaving the steam turbine oil conditioner equipment out of service, unable to operate continuously and perform the proper cleaning of the TV turbine oil.	CFE indicates in its Statement of Defense that this work was charged by DOOSAN under contract 750000063, however, GPS did not find in the information provided by CFE any item related to WC-112.	Empalme obtained 2 quotes. The lowest quote was from LOSNOGA, for \$59,600.48 MXN.

WCs that CFE considers to be "Closed" but for which the Claimant questions the use of resources from the HSBC Letter of Credit to cover them.

478. The Claimant has pointed out that several Warranty Claims were "closed" by the Respondent, but that it was not appropriate to do so, as it did, from the proceeds of the enforcement of the HSBC Letter of Credit. In these cases, it rejects the collection made by the Respondent against the HSBC Letter of Credit.³⁵⁴
479. Since the Tribunal has previously ruled in this Award that the Respondent's enforcement of the HSBC Letter of Credit was improper, it was equally improper to have applied resources for the resolution and "closure" of the following Warranty Claims, when they had already

³⁵⁴ See Exhibit A-100.

been, inter alia: (a) "automatically closed" in accordance with the WC Management Procedure; and (b) resolved to by Claimant: WC-010, WC- 018, WC-0 20, WC-032, WC-089, WC-090, WC-101, WC-102, WC-108, WC-115, WC- 164, WC-165, WC-166, WC-167, WC-178, WC-179, WC-180, WC-181, WC-182, WC- 183, WC-186, WC-189, WC-190, WC-192, WC-193, WC-196, WC-197, WC-198, WC- 199, WC-200, WC-202, WC-203, WC-208, WC-09, WC-214, 215, WC-216, WC-220, WC- 221, WC-222, WC-223, WC-224, WC-225, WC-227, WC-229, WC-230, WC-231, WC- 232, WC-235, WC-236, WC-242 and WC-243.

Conclusions

480. Based on the above analysis, the Tribunal concludes that, of the total Warranty Claims filed by CFE, only 9 (nine) are admissible, as follows:

No.	Warranty Claim Description	Resolution Cost (US Dollars)
19	Heat exchangers cause control oil temperature of 50 °C in TG2, while in TG1 there is only one heat exchanger in service with a temperature of 40°C, this equipment are for 100%.	US\$156.88
21	The signals of the medium pressure bypass temperature elements (degree of overheating) are simulated.	US\$2,809.62
22	Recurring simulation during coupling maneuvers of train 1 or train 2.	US\$7,099.42
24	The temperature of the intermittent purge tank of the GVRC 1/2 has to be simulated for the opening of the intermittent purge drain valve.	US\$7,099.42
82	Response to multiple alarms suppressed and present in the T3000 system, corresponding to TG 1 and TG2.	US\$10,499.98
180	No adequate electrical grounding	US\$1,380.29
181	No adequate electrical grounding	US\$1,380.29
182	Missing grounds connected to covers of the TG1 electric generator couplings.	US\$520.44
183	Missing grounds connected to covers of TG2 electric generator couplings	US\$520.44

No.	Warranty Claim Description	Resolution Cost (US Dollars)
	Total:	USD \$31,466.78

Concept of Unrecognized Work Progress

Background Information

481. As stated in the case file,³⁵⁵ CFE and Empalme entered into the Fifth Amendment Agreement on March 4, 2019, in which the date of Provisional Acceptance was extended for one hundred fifty-eight (158) days, due to the fact that, although the Power Plant was ready for the completion of Performance Tests, CENACE had not authorized their performance. Among other events:
- (a) in the month of September 2018, CENACE reported that it did not authorize load tests for reliability of the national interconnected system, limiting the authorization of tests with load of less than 405.4 MW Net;
 - (b) at the beginning of October 2018, it also did not authorize 100% load testing, limiting the authorization of tests with load of less than 700 MW of capacity;
 - (c) once it had scheduled for October 24-31, 2018 for 100% capacity testing, CENACE subsequently rescheduled the dates for November 5-13, 2018;
 - (d) subsequently, on October 31, 2018 CENACE again reported the "no authorization" attributing the cause to "reliability problems of the National Electric System", leaving the dates open; and³⁵⁶
 - (e) in early November 2018, CFE proposed to that the Claimant carry out certain operational tests at the load proposed by CENACE, but for reasons not attributable to the Parties it was not possible to do so at 100% load.
482. Notwithstanding the above delays, the Claimant initiated the Operational Test on November 9, 2018 under criteria authorized by CENACE, and on November 24 signed the

³⁵⁵ See background information of the Fifth Amendment Agreement.

³⁵⁶ Official Correspondence No. CENACE/DOPS-SO-GCRNO/1283/2018.

Final Operational Test Report with CFE, the Power Plant having complied with the acceptance criteria.

483. However, in response to a new request to perform the Tests on December 13, 2018, CENACE indicated that the safe operating conditions to perform the tests at 100% load required by the Power Plant had not been met.
484. When the Fifth Amendment Agreement was signed, CFE agreed to issue the Provisional Acceptance Certificate, but the parties agreed that CFE would withhold "... *an amount proportional to the pending Work as of February 2019.*"³⁵⁷
485. In the same Fifth Amendment Agreement, it was established that the Claimant, as the Contractor, would have the obligation to carry out the corresponding 100% load tests within a maximum term of six (6) months from the issuance of the Provisional Acceptance Certificate, provided that CENACE granted the required conditions.³⁵⁸

Empalme's Position

486. In its Statement of Claim, Empalme alleges that CFE withheld the amount corresponding to 99.9293% of the unacknowledged work progress based on the third clause of the Fifth Amendment Agreement but that, by March 2019, they had a higher level of progress totaling 99.9559%.³⁵⁹
487. In Empalme's Pre-Hearing Brief, the Claimant states that it should be deemed to have complied with the Pending Tests because it made its best efforts and was unable to do so for reasons beyond the Claimant's control. However, it added that, should the Tribunal consider that Empalme has failed to comply with its obligations under the Contract and the Fifth Amendment Agreement, it should be paid the proportional part of the amount withheld corresponding to the Pending Tests and the work that was performed.³⁶⁰
488. Finally, in its Closing Memorial, the Claimant argues that it was agreed that the amount withheld should be paid "*upon completion of the Performance Tests and 100% Load Tests or upon the expiration of the six-month period following the signature of the*

³⁵⁷ Fifth Amendment Agreement, Clause Three, second paragraph. See CFE-P0M27039-C-EPCDP-CFE-0506AR, (A-107).

³⁵⁸ Fifth Amendment Agreement, Clause Three, fourth paragraph.

³⁵⁹ Fifth Amendment Agreement, Clause Three, fourth paragraph.

³⁶⁰ Empalme's Pre-Hearing Brief, ¶¶ 61 and 153.

Provisional Acceptance"³⁶¹ and, since the conditions have already been fulfilled, the Respondent is obliged to pay the withheld amount.³⁶²

489. In response to the Respondent's statement that Empalme had made the performance of the Performance Tests conditional on the extension of the Operational Warranty, the Claimant argues that not only are these not attributable to the Claimant, but that, on the contrary, they are attributable to CFE, since the latter refused to assume the risk of loss of the Power Plant when it was responsible to assume that risk under the Contract, in addition to the fact that CFE failed to take into account the days of preparation, the duration of the tests and scheduling notices in accordance with Exhibit 2 of the Fifth Amendment Agreement and that it did not have the conditions to carry out the Pending Tests and the continuous refusals by CENACE to conduct tests on weekends and the order to lower the load, causing interruption to the test sequence.³⁶³

CFE's Position

490. In its Statement of Defense, the Respondent accepts that, according to Clause Three of the Fifth Amendment Agreement, "*The Commission shall withhold the amount proportional to the pending Work progress recognized as of February 2019*".
491. Moreover, the Respondent states that it retained the sum of USD \$337,128.97 equivalent to 99.9293% of recognized work as of February 2019, taking into account that the total amount of the Contract is USD \$476,844,369. CFE accepted that this amount would be paid upon completion of the Performance Tests and 100% load tests or upon completion of the 6-month term from the signature of the Provisional Acceptance Certificate,³⁶⁴ but that it is not obliged to settle any of the withheld amount due to the Claimant's failure to comply with its obligations. It expresses it this way: "...*the Tribunal must assess whether the Claimant is entitled to receive the full payment concluded by the CFE expert, since it did not complete the Tests within the originally agreed six-month period due to the caprice of refusing to perform the tests because it did not have the Operational Warranty which was never subject to its existence during that period.*"³⁶⁵

³⁶¹ Fifth Amendment Agreement, Clause Three, fourth paragraph.

³⁶² Empalme's Closing Memorial, ¶ 18.

³⁶³ Empalme's Pre-Hearing Brief, ¶ 59.

³⁶⁴ Statement of Defense, 2345 and 2348.

³⁶⁵ CFE's Closing Memorial, ¶¶ 55-56.

492. The Respondent also argues that Empalme stated at the time that the Performance Tests and other contractual tests for the operation of the Power Plant could not be carried out unless CFE assumed liability for the risks since the property was at that time under the control of the Federal Government and it argued that the tests were not completed because the Respondent "did not extend the Operational Warranty."³⁶⁶

Analysis of the Arbitral Tribunal

493. Regarding the Claimant's claim for work not recognized in Clause Three of the Fifth Amendment Agreement, the Tribunal indicates that under the terms of the Fifth Amendment Agreement the amount agreed upon by the parties was the one with a cutoff date of February 2019, and that this amount totals USD \$337,128.97 dollars.³⁶⁷
494. The Tribunal has no doubt that the Performance Tests and any other contractually established tests that were to be performed prior to the signature of the Fifth Amendment Agreement, were motivated by the lack of authorization by CENACE to perform the tests, for various reasons that were acknowledged by the Parties themselves in the background sections of both the Fourth and Fifth Amendment Agreements. The delays were not attributable to the Claimant.
495. Moreover, the Parties had acknowledged that the Plant was in a position to generate revenue, and therefore CFE agreed to issue the Provisional Acceptance Certificate.
496. By signing the Fifth Amendment Agreement on March 4, 2019, Empalme had the obligation to perform the Performance Tests and the contractual tests at 100% load within the following six (6) months "... provided that CENACE grants the conditions required for the performance thereof..."³⁶⁸ [emphasis added by the Tribunal].
497. Both Parties acknowledge that the Performance Tests were conducted in a timely and satisfactory manner, and in compliance with the standards established in the Contract and applicable regulations.³⁶⁹
498. However, certain tests remained pending. The Tribunal notes that there were several subsequent attempts to plan, schedule and reschedule the pending tests at 100% Load. One

³⁶⁶ CFE's Closing Memorial, ¶ 48.

³⁶⁷ Empalme's Pre-Hearing Brief, ¶ 153.

³⁶⁸ Fifth Amendment Agreement, Clause Three, fourth paragraph.

³⁶⁹ Empalme's Pre-Hearing Brief, ¶ 34 and Statement of Defense, ¶ 131.

was caused by the failure to obtain authorization from CENACE, another was at the request of CFE and yet another was at the request of Empalme, since it requested that the Respondent assume liability for any eventuality, given that the Plant was already under the control and custody of CFE. Furthermore, the Respondent itself has acknowledged that during the period in dispute *"it was not possible to ensure conditions both for CENACE's authorization for performance of the tests, as well as to ensure the availability of fuel which the Commission was required to process."*³⁷⁰

499. Even though the Respondent argued that during the months of June and July 2019, conditions existed for the tests to be carried out, the Tribunal was not provided with evidence that CENACE or CFE had been ready for the tests to be carried out. In fact, the test that had been scheduled for the last days of September 2019 was interrupted in the middle of the test sequence on September 26, 2019, on the instructions of CENACE.³⁷¹
500. Regarding whether or not the performance of the tests was conditional on the existence of the Operational Warranty, as alleged by the Respondent, the Tribunal finds that there were even communications between the Parties in early July 2019 -when the Power Plant was already under the control of CFE -³⁷² in which there is evidence that CFE was indeed seeking to assume responsibility for the performance of the pending tests. The Parties have also submitted evidence that attempts were made to schedule tests at a later date, but the parameters set forth in the Fifth Amendment Agreement were not met.³⁷³
501. After CFE requested further adjustments to the test schedule on September 23, 2019, Empalme confirmed to CFE that conditions were in place to conduct the Pending Tests on September 26, 2019. That date was the last day under the deadline stipulated in the Fifth Amendment Agreement to perform the tests, i.e., six (6) months after the issuance of the Provisional Acceptance Certificate.

³⁷⁰ Statement of Defense, ¶ 102 and 105.

³⁷¹ Empalme's Pre-Hearing Brief, ¶ 43.

³⁷² See CFE official correspondence DCIPI/CFFE/0178/2019 (Exhibit A-071).

³⁷³ See, among others, Exhibits CSPPS/CCEI-1119/2019 (Exhibit-078) and Exhibit-101. Clause Three of the Fifth Amendment Agreement establishes CFE's obligation to notify Empalme in writing 30 days in advance and confirm at least 21 days prior to the beginning date of testing, so that Empalme could mobilize resources.

However, CENACE ordered load shedding while the tests were being performed, resulting in interruption of the tests and leaving several of them pending.³⁷⁴

502. In the Cámara Anzures Expert Report, the expert affirms that as of the February 2019 cutoff (which was the cutoff month according to the Fifth Amendment Agreement) progress in the work was 98.5861%. The payment of the amount of USD \$337,105.1267 dollars (less costs for unrecognized work) was subject to the completion of the Performance Tests and the 100% load tests.³⁷⁵
503. In view of the foregoing, the Tribunal considers that the Claimant made reasonable efforts to achieve the completion of the tests, complying with the Performance Tests, but the 100% load tests were still pending. The fact that performance of the tests was not feasible is not attributable to the Claimant. Consequently, and in accordance with the provisions of the last paragraph of Clause Three of the Fifth Amendment Agreement: *"If after a period of six months, counted from the issuance of the Provisional Acceptance Certificate, it is still impossible to carry out the Performance Tests and 100% Load Tests and if this impediment is due to causes beyond the Contractor's control, the Contractor shall be released from the obligation to perform the tests, and such tests shall be deemed to have been satisfactorily completed with all the requirements established in the Contract related thereto."*
504. Since the Provisional Acceptance Certificate was issued on March 26, 2019,³⁷⁶ the Tribunal concludes that the Claimant was released from the obligation to perform the pending tests under the terms of the Contract, with the corresponding consequences that include, among others, the Respondent's obligation to deliver to the Claimant the sum of USD \$337,128.97 dollars, which was withheld by CFE in connection with the conclusion of the Fifth Amendment Agreement.³⁷⁷

³⁷⁴ According to Exhibit 2 of the Fifth Amendment Agreement, in order to carry out the pending tests, it was necessary for load to have been at 100% for an uninterrupted period of 5 days; otherwise, it would be impossible to continue with the tests. This did not occur. Furthermore, the Claimant has argued that according to the Power Plant Logs (Exhibit A-111, Logs dated September 7 to October 6, 2019) after the decrease in the load of the Power Plant was ordered on September 26, 2019, it did increase again, but continued decrease in subsequent days, therefore the conditions required to complete the remaining tests did not exist. See Empalme's Pre-Hearing Brief, ¶ 56.

³⁷⁵ See Statement of Defense, ¶¶ 2348-2349.

³⁷⁶ Exhibit A-009.

³⁷⁷ Although the difference between the amount claimed by Claimant and the amount acknowledged by Respondent totals a mere USD \$23.84, the Tribunal notes that the correct figure is the one stated by the Claimant, as recorded in Exhibit A-107, Official Correspondence CFE-P0M27039-C-EPCDP-CFE-0506 of November 15, 2019.

Additional unanticipated work**Empalme's Position**

505. In its Statement of Claim³⁷⁸ Empalme stated that there are additional works or works not anticipated in the Contract, which it performed and which have not been paid by the Respondent. The Claimant categorizes them as follows:
- (a) Works that are in response to a change order (activities that were ordered directly by CFE), which in turn consist of:
 - Power Plant Island mode.
 - Implementation of the Medium Voltage Fast Transfer.
 - (b) Additional civil works.
 - Soil improvement in the area of GVRC unit number 1.
 - Increase in the length of the pilings for the foundations of the power plant equipment.
506. Regarding the former, the Claimant notes that Respondent has agreed to the payment of the total amount of USD \$109,299.58, of which USD \$100,713.46 corresponds to fast transfer implementation work and USD \$8,586.12 corresponds to Power Plant Island mode implementation work,³⁷⁹ and therefore this work should be considered to have been accepted and pending payment.
507. Regarding the latter, Empalme points out in its Statement of Claim³⁸⁰ that regarding the soil improvement in the area of the GVRC unit number 1 in the bid documents, CFE had the "Soil Mechanics Study for the Geotechnical Characterization of the CCC Guaymas II and III Project (Cochorit Beach), Municipality of Empalme, in the State of Sonora", dated June 9, 2014, and this study only applied to the specific conditions under which the study had been performed. However, the Claimant subsequently submitted Soil Mechanics Study Rev. 2³⁸¹ to CFE, in which it argued that, based on the results, the initial study submitted by CFE did not reflect the actual site conditions.
508. A similar position is adopted by Empalme with respect to the additional costs incurred due to the increase in the length of pilings for the foundations of the project equipment, since the

³⁷⁸ Statement of Claim, ¶ 1030.

³⁷⁹ Empalme's Closing Memorial, ¶ 32.

³⁸⁰ Statement of Claim, ¶ 1044

³⁸¹ GPS Exhibit 108.

increase was necessary due to the liquefaction phenomenon. The soil conditions identified in the study were different. Empalme adds that CFE carried out the Soil Study provided in the pre-contractual stage based on a location of the Power Plant that was very different from the final location requested by CFE.

509. According to GPS Expert Report II, the Claimant affirms that GPS concluded that the soil studies conducted by Empalme identified *"different and significantly more unfavorable soil conditions for the construction of the foundation than provided for the original location and consequently resulted in the need to construct foundations that required further, unanticipated works."*³⁸² As GPS stated at the Hearing, *"[...] a large part of the borings were displaced to the south [...] and the commission tendered the works with borings erroneously located on a site with very heterogeneous conditions."*³⁸³
510. In response to the Respondent's position that the engineering and studies delivered by the Respondent were provided as a reference, and that it was the obligation of the Claimant as the Contractor under the Contract, to perform the necessary additional soil studies and engineering development, the Claimant accepts that it was part of the scope of work assigned under the Contract, however it contends that its claim does not relate to the costs of the studies, but rather to the costs of the work performed.³⁸⁴
511. The Claimant claims a total of USD \$3,457,826.88 for additional work.³⁸⁵

CFE's Position

512. In its Statement of Defense, the Respondent acknowledged the works related to (i) the fast transfer of medium voltage auxiliaries and (ii) the implementation of the island mode of the Power Plant.³⁸⁶
513. However, regarding the improvement of the soil in the area of the GVRC equipment, the Respondent pointed out that the requirements had been established since the tender was launched and CFE was released from the liability and risks derived therefrom until it began to operate and took ownership of the plant.³⁸⁷

³⁸² Empalme's Pre-Hearing Brief, ¶ 156, citing GPS Expert Report II, ¶16 (AP-002).

³⁸³ Empalme's Closing Memorial, ¶ 52, citing Transcript 02-16-2022 (Part 2), ¶ 14.

³⁸⁴ Empalme's Closing Memorial, ¶¶ 50-51.

³⁸⁵ Empalme's Pre-Hearing Brief, ¶ 169, supported by GPS Expert Report II.

³⁸⁶ Statement of Defense, ¶ 2403.

³⁸⁷ Statement of Defense, 2407.

514. On the other hand, the Respondent argues that Empalme, as the Contractor, was aware of the studies that had been delivered by the Commission from the very beginning, and that they served only as a reference, thus the Contractor was responsible to complete the corresponding site studies.³⁸⁸
515. In addition, CFE notes that, although the Claimant points out that the geotechnical study provided to Empalme was not performed with respect to the specific site where the project was finally built, according to the terms of reference for the bid it was established that the studies performed by CFE at the basic engineering level were "*general in nature and therefore only intended to provide Bidders with a technical reference to facilitate the preparation of their bids.*"³⁸⁹ In other words, Empalme was left with the responsibility to prepare the foundation and equipment studies, since the information provided by CFE was only a "reference".
516. Regarding the second point, the increase in the length of the pilings for the equipment foundations, the Respondent argued that the completion of the geotechnical studies of the site and the completion of the detailed engineering for the foundations are the full responsibility of the Contractor, and therefore no payment for such concept is due.
517. Furthermore, the Respondent highlights that, according to the Camara Anzures Expert Report, it is indicated that "*According to the evidence presented that the geotechnical studies, as well as the development of the Detailed Engineering, which resulted in the determination of the location of the Main Equipment in the General Layout, are obligations of the Contractor under the Contract, the undersigned considers that the claim presented by the Contractor is inadmissible as ADDITIONAL WORK OR WORK NOT ANTICIPATED by the Contractor, therefore in our opinion the Commission is not obliged to recognize, or pay any amount to the Contractor for this concept.*"³⁹⁰

Analysis of the Arbitral Tribunal

518. The Tribunal first notes that the Parties agree regarding the appropriateness of the payment by CFE for the fast transfer implementation work (in the amount of USD \$100,713.46) and for the Power Plant island mode implementation work (in the amount of USD \$8,586.12).

³⁸⁸ Statement of Defense, ¶ 2415.

³⁸⁹ Call for Bids, section 7.1.5.

³⁹⁰ DP-001 972.

Consequently, these amounts must be considered to have been accepted and are pending payment by the Respondent.

519. With respect to the two additional items, the Tribunal identifies that the common element is that both are the result of the need for additional work to be performed by the Claimant outside the original scope of the Contract, derived from the soil studies and engineering development performed by the Claimant in response to its contractual responsibility to analyze the information submitted by CFE as a "technical reference". Soil Mechanics Study Rev. 2 was prepared by Fuerte Ingenieros Consultores, S.A. de C.V.³⁹¹
520. The Claimant has agreed that the costs related to soil studies and engineering development should be covered by the Claimant.³⁹² It is therefore not necessary for the Tribunal to rule on the appropriateness of those costs.
521. However, the Claimant's claims are not related to the cost of those studies or engineering development, but to the additional work performed derived from the results of such studies.
522. There is no evidence or argument which indicates that the Respondent has objected to the results of the soil studies and engineering development that resulted in the need to change the site, since the presence of the "Liquefaction" phenomenon was detected, which basically refers to the fact that soil that is subject to the action of an extreme force or load can change from a solid to a liquid state, which required the implementation of soil improvement.
523. Taking into account that the additional works performed were not included in the scope of the Contract but were performed as a result of the Respondent's decision to move the site, the Claimant's claim for the cost of such works corresponding to (a) the improvement of the soil in the area of GVRC 1, and (b) the increase in the length of the pilings for the foundation of the plant equipment, is admissible.
524. According to the GPS Expert Report,³⁹³ the first works were subcontracted by the Claimant from IFC Cimentaciones Especiales, S.A. de C.V., which are calculated at USD \$937,921.76 dollars.³⁹⁴ Likewise, for the works related to the increase in the length of the pilings for the

³⁹¹ GPS Exhibit 108. Transmittal CFE-P0M27039-TR-0161

³⁹² Empalme's Pre-Hearing Brief, ¶ 156.

³⁹³ GPS Expert Report II, ¶¶ 444.

³⁹⁴ GPS Expert Report II, ¶¶ 444-449

equipment foundation, the Claimant also subcontracted IFC Cimentaciones Especiales, S.A. de C.V., the cost incurred being USD \$2,410,605.54 dollars.³⁹⁵ In both cases, the GPS expert determined the reasonableness of the amount and supporting documentation.

525. Accordingly, the Tribunal rules that these costs for additional work incurred by the Claimant, totaling USD \$3,348,527.30, should be covered by Respondent.

Costs Associated with May 27 - September 26, 2019 Testing

Empalme's Position

526. The Claimant contends that, pursuant to Clause Three of the Fifth Amendment Agreement, the Respondent is obliged to recognize the expenses it incurred in the performance of the Pending Tests.³⁹⁶
527. In its Statement of Claim³⁹⁷ the Claimant points out that the "unjustified" delays by the Respondent in the performance of tests caused the Claimant to incur various expenses to keep on site or call upon contractors to carry out the Performance Tests inherent to the completion and final delivery of the Power Plant.
528. The Claimant affirms that it timely submitted "complete and sufficient" documentation to support the request, but that CFE has refused to make timely payment, for which it also claims payment of the financial costs incurred.³⁹⁸
529. In response to the fact that the Expert Camara Anzures does not take into consideration the costs corresponding to the period between July 6 and August 18, 2019, nor those related to technical personnel (referred to by the parties as "TFAs"), the Claimant argues that it is "completely inadequate" since, although it agrees that it demobilized from the Site, this was only from July 6 to 29, 2019, and with respect to the TFAs, it argues that they constitute basic personnel required to perform the Pending Tests.³⁹⁹
530. Empalme claims a total of USD \$2,481,438.30 for this concept.⁴⁰⁰

³⁹⁵ GPS Expert Report II, ¶¶ 450-460

³⁹⁶ Empalme's Closing Memorial, ¶¶ 41-45.

³⁹⁷ Statement of Claim, ¶ 1019.

³⁹⁸ Statement of Claim, ¶ 1028.

³⁹⁹ Empalme's Closing Memorial, ¶ 44.

⁴⁰⁰ In its Statement of Claim, the Claimant claimed USD\$2,526,978.26.

CFE's Position

531. In its Statement of Defense, the Respondent acknowledged that there was an agreement between the Parties in the Fifth Amendment Agreement that CFE would acknowledge and pay the corresponding "reasonable and documented" expenses incurred by the Claimant in the performance of pending tests due to delays not attributable to the Claimant.⁴⁰¹
532. However, it stated that *"there is no evidence to show that the Contractor had performed the corresponding contractual tests, resulting in a breach of its contractual obligations, which the Contractor is attempting to justify with the pretext that the Commission did not agree to cover the cost of the term of the Operational Warranty; in that regard, the chronological order of the facts is described below,"*⁴⁰² furthermore that it provided evidence to the effect that the Claimant itself reported on June 21, 2019 that it would demobilize the personnel required for the pending tests.⁴⁰³
533. In his expert report, Mr. Cámara Anzures⁴⁰⁴ acknowledges that he reviewed various documents that allowed him to evaluate the work performed on the pending tests during the period from May 27 to July 5, 2019, and subsequently from August 19 to September 26, 2019, but did not acknowledge the charges sought by the Claimant corresponding to the period from July 6 to August 18, since it demobilized its personnel.⁴⁰⁵
533. Engineer Cámara Anzures also acknowledges that he agrees with the GPS Expert regarding the mechanism used to quantify the costs, since he applies recognition factors applicable for each period.⁴⁰⁶

Analysis of the Arbitral Tribunal

534. The Tribunal notes that the following agreement is set forth in the third and fourth paragraphs of the Third Clause of the Fifth Amendment Agreement:

"... The Parties agree that the Contractor shall perform the Performance Tests and the pending contractual Tests at 100% Load and that the Commission shall acknowledge and pay the reasonable and documented corresponding expenses that the Contractor

⁴⁰¹ Statement of Defense, ¶ 2380.

⁴⁰² Statement of Defense, ¶ 2381.

⁴⁰³ Exhibit D-763, Official Correspondence CFE-P0M27039-C-EPCDP-CFE-0450.

⁴⁰⁴ Cámara Anzures Expert Report, Exhibit DP-001, ¶ 865.

⁴⁰⁵ Cámara Anzures Expert Report, Exhibit DP-001, ¶¶ 923-929.

⁴⁰⁶ Cámara Anzures Expert Report, Exhibit DP-001, ¶ 931.

may incur in the performance of the aforementioned Tests, provided that the same shall not be a repetition of the tests due to issues associated with the Contractor.

"Within a maximum term of six months from the issuance of the Provisional Acceptance Certificate, the Contractor shall have the obligation to perform the corresponding Performance Tests and the contractual tests at 100% Load, provided that CENACE grants the conditions required for the tests, subject to the provisions of Exhibit 13 of the Contract, and the corresponding degradation of the turbogenerators must be considered, in order to validate the Guaranteed Values."

535. The Claimant was ready to carry out the tests but, as has already been proven in this arbitration proceeding, despite the fact that the Claimant was willing to carry out the Performance Tests, the delays were caused by CENACE in setting the dates or postponing them, and therefore the delay is not attributable to the Claimant, who was willing to carry them out and even incurred direct and indirect costs, materials, consumables and services for that purpose.

536. However, the Tribunal notes that, in effect, during the period from July 6 to August 18, 2019 the Claimant "demobilized" its personnel and resources, making it impracticable to conduct the tests during that period.

537. The Tribunal accepts the itemization presented by expert Cámara Anzures⁴⁰⁷ in determining the calculation of the costs incurred.

Description	Cost Ratio by Period (USD Dollars)				
	May 27 to June 5	July 6 to August 18	August 19 to September 26	Partial Amount	Exhibit ⁴⁰⁸
Direct Costs	\$326,435.53	\$ 0.00	\$156,264.69	\$482,700.22	Exhibit 142 Direct Cost Support
Indirect Costs	\$248,113.45	\$ 0.00	\$241,678.81	\$489,792-26	Exhibit 143 Indirect Cost Support
Consumable Materials	\$155,422.96	\$ 0.00	\$ 0.00	\$155,422.96	Exhibit 144 Materials and Consumables Support
Services	\$ 0.00	\$ 0.00	\$86,937.01	\$86,937.01	Exhibit 145 Services Support

⁴⁰⁷ Cámara Anzures Expert Report, Exhibit DP-001, ¶ 932.

⁴⁰⁸ Correspond to exhibits attached to the Cámara Anzures Expert Report, Exhibit DP-001.

TFA's	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	Exhibit 145A TFA's Support
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538. Accordingly, the Tribunal rules that these costs incurred by the Claimant associated with the testing totaling USD\$1,214,852.45 should be covered by Respondent.

Expenses and costs arising from the January 16, 2019 Agreement on the application of Clause 25.5 of the Contract.

Background Information

539. Clause 25.5 of the Contract provides that, if the "Scheduled Provisional Acceptance Date" - as defined in the Contract - is delayed for a period that exceeds sixty (60) days due to an event of "Governmental Force Majeure" or [acts of God] events identified in Clause 12.3(b) of the Contract, the Contract would automatically terminate unless the Parties reach an agreement regarding the terms and conditions that *"shall reasonably compensate the Contractor for any reasonable and documented expenses directly related to the Works that the Contractor may incur (which shall include servicing the Contractor's Debt in connection with the Financing Agreements and any similar financing provided by any of the Participants or any of their Affiliates) as a consequence of any delay..."*
540. Taking into account the delays in the Scheduled Provisional Acceptance Date that were acknowledged by the Parties as a consequence -basically- of CENACE's failure to authorize certain acts necessary for the completion of the Performance Tests and other 100% Load Tests,⁴⁰⁹ on January 16, 2019 the Parties entered into an Agreement between the Parties Regarding the Application of Clause 25.5 to Fulfill the Purpose of Contract PIF-017/2015 (the "25.5 Agreement"),⁴¹⁰ in which they established the basis for determining the appropriate amount the Claimant would receive as compensation. These concepts include the following: (i) financial, insurance and guarantee, (ii) expenses for personnel management and administration of local field offices, (iii) third party claims, and (iv) extension of warranties for equipment and/or facilities.
541. The Claimant acknowledges that the Respondent has already covered the financial, insurance and guarantee costs,⁴¹¹ and the Parties have reached an agreement regarding the expenses for the management of personnel and administration of local field offices in the amount of USD

⁴⁰⁹ The Representations of the 25.5 Agreement list the delays acknowledged by the Parties.

⁴¹⁰ Exhibit A-007.

⁴¹¹ Statement of Claim, ¶ 997.

\$6,950,822.24 dollars.⁴¹² It adds that it even delivered to CFE a credit memorandum for withholding 5 per thousand of the value of the invoice corresponding to the withholding for the performance of public works.⁴¹³

CFE's Position

542. In its Statement of Defense, the Respondent acknowledged⁴¹⁴ that there is an agreement between the Parties for CFE to pay the Claimant the amount of USD \$6,950,822.24 for personnel management and field office administration, derived from the 25.5 Agreement, Paragraph 3.2, plus its financial costs at the financial expense rate in the amount of USD \$163,861.91 dollars.⁴¹⁵
543. However, the Respondent disputes the admissibility of the third party claims. It points out that, after the Parties met at the end of January 2020, and the Claimant provided it with information on this item, CFE issued comments and identified missing information from the support of the claimed invoices, which did not make it possible to determine the provenance of the claimed expenses.⁴¹⁶
544. With respect to the Claimant's statement that, once it had provided the information, the Respondent "remained silent", the Respondent indicates in its Statement of Defense that the Commission decided "to abide by the outcome of the Arbitration Proceeding, and set forth the reasonableness of the information submitted by the Contractor in each of its claims, in order to establish the amount owed, since the Claimant is attempting to claim that, with the simple submission of invoices to support the amount claimed, they will be covered in their entirety, without analyzing the reasonableness and admissibility of those amounts."⁴¹⁷
545. The Respondent argues that the third party claims submitted reflect activities performed that do not correspond to activities inherent to the Work and that are part of the scope of the Contract, as stated in the work log notes, with regard to the progress provided in the monthly schedules reconciled between both Parties, and therefore do not meet the requirements set forth in the 25.5 Agreement.⁴¹⁸ CFE adds that the Claimant does not prove that the claimed expenses are the result of a claim from suppliers or subcontractors, nor was documentary

⁴¹² The Claimant adds that it even sent the invoice in Communication CFE-P0M27039-C-EPCDP-CFE-0573 dated July 9, 2020 (Exhibit A-032).

⁴¹³ Empalme's Pre-Hearing Brief, ¶ 144.

⁴¹⁴ Statement of Defense, ¶ 2354.

⁴¹⁵ Statement of Defense, ¶ 2452 (Amounts are subject to adjustment).

⁴¹⁶ Statement of Defense, ¶¶ 2358-2361.

⁴¹⁷ Statement of Defense, ¶ 2364.

⁴¹⁸ Statement of Defense, ¶ 2366.

evidence provided to demonstrate that the claimed costs are due to an impact caused by the extension to the Scheduled Provisional Acceptance Date.⁴¹⁹

546. The Respondent shows a table of month-to-month progress of the project reconciled with the Contractor⁴²⁰ in which it points out that, in the month of March-April 2018, Empalme achieved the 35% progress established in Contract PIF-017/2015 for the works included in the Construction Phase, which is equivalent to 100% of this phase and was working on the completion of pending construction during this period. Likewise, it points out that "*... from the same table it is observed that the value of the Commissioning stage was equivalent to 5% of the value of the Contract activities and that, at the cutoff as of February 2018, the Contractor progressed 80.695% or 4.0384% of the Project for the PEM works..., having that from the February cutoff and up to the August 2018 cutoff, the Contractor reached an advance of 96.6604% of PEM, which is equivalent to 4.8330% of the Project, or 0.7982%, for the activities developed from the month of March 2018 to the month of August 2018, the period covered by the analysis,*"⁴²¹ and concludes that the Claimant's claims are included in the Price of the Contract.
547. In its Closing Memorial, the Respondent confirms that the Claimant did not demonstrate in the proceeding any claim from third parties or subcontractors in the period agreed in the 25.5 Agreement, therefore "*... it does not comply with the attributes of this agreement related to Clause 25.5, which is the reimbursement of expenses incurred and documented, hence the amount claimed totaling USD 2,841,941.71, is inadmissible.*"⁴²²

Empalme's Position

548. The Claimant mentions that it held meetings with CFE in January 2020 in order to review and reconcile the costs, and that it subsequently sent CFE the supporting documentation, but that the Respondent has not yet commented on that point.⁴²³ The amount claimed by Empalme totals USD \$2,841,941.71.
549. Empalme argues that these expenses are supported by Clause 3.3 of the 25.5 Agreement, since, according to the Contract, the purpose would be to remunerate Empalme for the delays in the Scheduled Provisional Acceptance Date of the Power Plant. Therefore, the 25.5

⁴¹⁹ Statement of Defense, ¶ 2370.

⁴²⁰ Statement of Defense, ¶ 2370.

⁴²¹ Statement of Defense, ¶ 2375.

⁴²² CFE's Closing Memorial, ¶¶ 85-86, in which it states that this was confirmed by witness Elena Oropeza, Transcript of 02-16-2022, Part 2, p. 24.

⁴²³ Statement of Claim, ¶¶ 1011-1014.

Agreement contains the terms and conditions under which this remuneration should be paid. Specifically, Empalme should be remunerated provided that the expenses corresponded to the period between March 8, 2018 and August 24, 2018.⁴²⁴

550. On the other hand, Empalme rejects CFE's argument that what Empalme is seeking is to be reimbursed for expenses derived from the extensions to the Scheduled Provisional Acceptance Date and that in the period recognized and agreed upon under the Fifth Amendment Agreement there was no possibility of third party claims.⁴²⁵ That is to say, that the third party claims were filed extemporaneously, outside of the specified time period. In that regard, it argues that GPS has concluded in its second Report that *"... the period that was established in the Clause 25.5 Implementation Agreement is the result of chronological mathematics that was carried in the previous amendment agreements taking into account the impacts not attributable to EMPALME which is what was recognized in those agreements. Therefore, the 170 days of impact that were set between the dates of March 8, 2018 to August 24, 2018 correspond to those impacts established in the Fourth Amendment Agreement (12 days), and the Fifth Amendment Agreement (158 days) ... "*⁴²⁶
551. Furthermore, the Claimant contends that it has been proven⁴²⁷ that the vast majority of the force majeure events and the consequent loss of productivity and loss of time caused to Empalme by the events that led to the failure to perform the tests in a timely manner *"did not occur within the recognition period established in the Agreement,"* as GPS has opined in its GPS Expert Report II, but that, nevertheless, the objective of the 25.5 Agreement is met, which is to compensate Empalme for the expenses derived from that delay, which is, moreover, attributable to CFE.⁴²⁸ In other words, despite the fact that the impacts on third parties that were related to those events happened after August 23, 2018, the truth of the matter is that, the recognition of the expenses incurred by the Claimant between March 8 and August 24, 2018, *"... does comply with the aim and purpose of the 25.5 Agreement, since it complies with the terms agreed upon by the Parties to compensate Empalme for the expenses it incurred as a result of the delays."*⁴²⁹
552. In fact, Empalme argues, CFE knew since the signature of the 25.5 Agreement that at least part of the recognition period would coincide with the startup stage of the Power Plant, since

⁴²⁴ Empalme's Closing Memorial, ¶ 35.

⁴²⁵ Empalme's Pre-Hearing Brief, ¶ 150.

⁴²⁶ GPS Expert Report II, ¶¶ 186-195 (Exhibit AP-002).

⁴²⁷ Empalme's Closing Memorial, ¶ 37.

⁴²⁸ GPS Expert Report II, ¶¶ 188-196 (AP-002).

⁴²⁹ Empalme's Closing Memorial, ¶ 37, Empalme's Pre-Hearing Brief, ¶ 152.

it was agreed in that Agreement that the period would begin on March 8, 2018. However, it was not until this arbitration that CFE attempted to disregard the terms of the remuneration to which the Parties had agreed in the 25.5 Agreement.

553. The Claimant argues that "... *what CFE intends to allege as an impediment to reimbursement is absurd,*"⁴³⁰ and "*it is illogical that CFE attempts to disregard the expenses incurred by Empalme during the period in question when it: (i) has recognized and paid the expenses incurred in that period corresponding to Clause 3.1 (Financial); and (ii) has acknowledged, both through the July 7, 2020 Agreement and in this Arbitration, the appropriateness of the reimbursement of the expenses incurred during that period corresponding to Clause 3.2 (Expenses for the Management of Personnel and Administration of Local and Field Offices).*"⁴³¹
554. Empalme concludes that, to go along with the arguments presented by CFE and disregard its claim under Clause 3.3 of the 25.5 Agreement, "*would be contrary to the purpose of the Agreement itself and Clause 25.5 of the Contract, since it would render the agreement of the Parties ineffective*"⁴³² and Empalme would be left with no opportunity to receive any remuneration for the costs it was unduly required to cover due to delays in the Scheduled Provisional Acceptance Date.
555. In response to CFE's position that the third party claims do not comply with the requirements established under the 25.5 Agreement, the Claimant contends that, while it is true that the Respondent submitted certain requests for information, these were satisfied in a timely manner.⁴³³

Analysis of the Arbitral Tribunal

556. The dispute lies in whether the payments that Claimant contends it has covered to pay third parties in connection with the work are admissible. Paragraph 3.3 of the 25.5 Agreement (Third Party Claims) states that it includes "*claims from suppliers and subcontractors received ... due to the extension of the Scheduled Provisional Acceptance Date and/or the reason that gave rise to this claim as described in this Agreement*" and expressly states that "*.... THE CONTRACTOR shall submit all the contractual and accounting information and any other information required for the analysis and origin of the concepts and amounts claimed by third parties,*"

⁴³⁰ Empalme's Pre-Hearing Brief, ¶ 151.

⁴³¹ Empalme's Closing Memorial, ¶ 38.

⁴³² Empalme's Closing Memorial, ¶ 39.

⁴³³ Empalme's Pre-Hearing Brief, ¶¶ 148-149.

557. As is the case with the reimbursement of other claims, the aforementioned paragraph 3.3 indicates that *"... all contractual and accounting information, as well as any other information required for the analysis and origin of the descriptions and amounts claimed..."* must be submitted, and Clause 4 (Guidelines) of the 25.5 Agreement covers the criteria that must be complied with in order for any claim to be admissible.
558. The Tribunal notes that, as a result of the 25.5 Agreement, paragraph 3.2, there is an acknowledgment by the Respondent of CFE's obligation to pay the Claimant a total of USD \$6,950,822.24 for personnel management and administration of local field offices plus its financial costs at the financial expense rate in the amount of USD \$163,861.91.
559. Though the Tribunal is aware that the Respondent has agreed to cover the above amount for personnel management and field office administration, and that the Claimant has argued that not accepting the same treatment for "third party claims" would run counter to the very purpose of the 25.5 Agreement, and that it even leaves itself with no opportunity to receive any remuneration for the costs it was required to incur as a result of the delays in the Scheduled Provisional Acceptance Date, the claim is based on a contractual rule voluntarily accepted by the Claimant itself that provides for the coverage period.
560. This is not a claim based on tort liability but is instead derived from an express agreement between the Parties. Since this is the case, the Tribunal finds no justification to rule in the manner requested by the Claimant, despite the fact that the Respondent has already recognized other amounts incurred during the period. For the above reasons, the Tribunal denies the Claimant's claim in the amount of USD \$2,841,941.71.

Final Acceptance of the Plant and signature of the Closing Statement.

Background Information

561. The final acceptance of the works was established in Clause 18 of the Contract, under paragraph 18.6 entitled "Final Acceptance", in which it was agreed that the Commission was obligated to issue a Certificate of Final Acceptance of the Plant to the Contractor, if and when the Contractor provided the following to the Commission:
- (a) *the written termination of guarantees related to the Power Plant referred to in Clause 20.10.*
 - (b) *at the request of the Commission, any other information that establishes the payment or satisfaction of obligations such as receipts, settlements or cancellation of Encumbrances, derived from the contract to the extent and in the form indicated by the commission.*

- (c) *evidence that the contractor has made all corrections or substitutions indicated by the commission in accordance with clause 18.4 above,*
- (d) *evidence that the warranty period has expired, and that the contractor has satisfactorily provided the plant warranty, and*
- (e) *8 (eight) printed copies and 1 (one) electronic copy in CD-ROM format of the final book of Documents according to Exhibit 5. If, having satisfied the conditions set forth in this Clause, the final acceptance certificate is not issued by the commission, the contractor may demand in writing that the commission issue the final acceptance certificate and if the commission fails to do so within 15 (fifteen) Days following receipt of such request it shall be understood that the Final Acceptance Certificate has been issued for all legal purposes; in the event of a dispute, the provisions of Clause 8 shall apply."*

Empalme's Position

- 562. The Claimant stated its position to the Arbitral Tribunal, requesting that the Final Acceptance of the Plant be declared and, consequently, that the closing statement for the Contract be ordered "*in accordance with the Law of Public Works and Related Services, as well as its Regulations*" due to the issuance of the Provisional Acceptance Certificate.⁴³⁴
- 563. Empalme has requested that the Tribunal bifurcate the arbitration proceedings, "*... in order to avoid them [the Parties] having to initiate separate arbitration proceedings with the economic and temporal implications that this entails.*"⁴³⁵
- 564. In its Pre-Hearing Brief, the Claimant states that at the time CFE issued the Provisional Acceptance Certificate, the Claimant stated that "*by virtue of the fact that all the works related to the project in question were [completed] and in accordance with the contractual specifications as well as all the works necessary for the proper operation of the critical equipment*" and that "*the care, custody and control of the Power Plant, as well as the risk of loss thereof [were] transferred to the Commission.*"⁴³⁶

⁴³⁴ Statement of Claim, ¶ 1067].

⁴³⁵ Statement of Claim, ¶ 1069.

⁴³⁶ Empalme's Pre-Hearing Brief, ¶ 163.

565. Subsequently, the Claimant bases its argument on Article 64, second paragraph of the Law of Public Works and Related Services, which states that: "*....Once the works have been physically received, the parties, within the term stipulated in the contract, which may not exceed sixty calendar days following the receipt of the works, shall prepare a closing statement for the contract, in which the resulting credits in favor and against each party shall be stated, describing the general concept that gave rise to them and the resulting balance.*"⁴³⁷

566. Subsequently, in its Closing Memorial, Empalme:⁴³⁸

- Requests the settlement of the Contract, the signature of the closing statement and the final acceptance of the Power Plant.
- Seeks the bifurcation of the proceedings to conclude the termination of the Contract.
- States that it has proven all the elements for the settlement of the Contract to be carried out, since the progress made is more than 99%.
- It asks that, if any MD remains open, that it would not be necessary to resolve it, since the amounts delivered by Empalme would be used for that purpose.

CFE's Position

567. The Respondent stated that Final Acceptance is inadmissible, arguing that the requirements of Clause 18.4 of the Contract were not fulfilled, since the Claimant had not made the corrections indicated by the Commission because there are MDs and WCs that are still open, and there are even pending matters that have not been resolved for reasons attributable to the Claimant.⁴³⁹

568. Based on the foregoing, the Respondent concludes that, since the obligations assumed by the Claimant have not been fulfilled, the closing statement cannot be signed since the requirements established in the Law of Public Works and Related Services and its Regulations have not been met.⁴⁴⁰

569. The Respondent expressed its disagreement with the request for a bifurcation on the grounds that this arbitration covers all actions and there is no other distinct claim that could be the subject of a bifurcation. Moreover, the Claimant has not expressed the reason why this bifurcation would reduce the time and costs of the dispute.

⁴³⁷ Law of Public Works and Related Services, Article 64.

⁴³⁸ Empalme's Closing Memorial, ¶¶ 109 and 110. Empalme's Closing Memorial, ¶¶ 109 and 110.

⁴³⁹ Statement of Defense, ¶ 2435.

⁴⁴⁰ Statement of Defense, ¶ 2437.

570. In its Closing Memorial, CFE states that the Tribunal does not have jurisdiction to rule on the closing statement because it is an act that derives from: (i) Early Termination of the Contract, or (ii) rescission of the Contract, since the Claimant never requested an action in that regard because "... *the Law applicable to the Contract specifically establishes that they may not be arbitrated based on Article 98.*"⁴⁴¹

Analysis of the Arbitral Tribunal

571. Regarding the Final Acceptance, the Tribunal finds that Clause 18, paragraph 18.6 of the Contract establishes that the Commission shall issue a Certificate of Final Acceptance to the Contractor, if and when each of the requirements indicated in the Contract have been met.
572. Based on the foregoing, the Tribunal has noted that the Contractor has not satisfactorily completed all the corrections to the Power Plant, and some of them are still pending, the cost of which must be covered by the Contractor itself, as previously analyzed in this Award. Notwithstanding the foregoing, the Tribunal cannot fail to note that the Parties themselves acknowledged since the signature of the Fifth Amendment Agreement that, by March 2019, the Contractor had achieved progress amounting to 99.9559%⁴⁴² of the Work, and the Commission has acknowledged that since then the Power Plant was generating electricity and was in a position to generate revenue. Therefore, the Tribunal considers that the Claimant's current obligations are essentially payment obligations, arising from the existence of outstanding Minor Defects or Warranty Claims that have been previously analyzed in this Award.
573. However, the Tribunal also notes that the amounts owed by the Claimant for such concepts are much lower in light of the amounts owed by the Respondent according to the analysis and conclusions reached previously in this Award, and that the amounts owed by the Claimant can be offset against those owed by the Respondent. Therefore, once this Award becomes final, it is appropriate for CFE to deliver the Final Delivery Certificate to the Claimant.
574. The Tribunal cannot rule on the enforcement of the closing statement requested by Claimant in its Memorial on Conclusions,⁴⁴³ since it is not empowered under the laws applicable to this matter to order the Parties to sign a closing statement. Although the Parties have

⁴⁴¹ CFE's Closing Memorial, ¶ 1.

⁴⁴² Fifth Amendment Agreement, Clause Three, fourth paragraph.

⁴⁴³ Empalme's Closing Memorial, ¶¶ 106-116.

submitted various disputed points to the Tribunal for its decision, this Tribunal is uncertain as to whether all of the Parties' obligations have been satisfied so as to permit the signature of a closing statement releasing both Parties from their respective obligations under the Contract. It has not been the Tribunal's task to ascertain such compliance, and therefore the closing statement should be signed by both Parties once their obligations have been fully satisfied, or once the Parties make reciprocal concessions that would allow the closing statement to be signed.

575. On the other hand, the Tribunal considers the request for bifurcation of the proceeding inadmissible, since, in addition to the fact that Empalme has not demonstrated the usefulness that a bifurcation would have in the proceedings, this Award fully and definitively resolves the disputed issues submitted to it for a decision, including, but not limited to, the amounts and payments claimed by the Parties.

Financial expenses / interest

Background Information

576. Clause 10 of the Contract (Payment) establishes the following in its subsection 10.1 (Form of Payment):

*"**10.1 Form of Payment.** No later than 12:00 P.M., New York City, New York State time, on the date on which the Price of the Contract or, if applicable, the Termination Value, becomes due, the Commission shall pay to the Contractor, without deduction (except for the ones referred to in this Clause 10 or for taxes required to be withheld in accordance with Applicable Laws), the Price of the Contract or applicable Termination Value, as the case may be, in Dollars, by means of an electronic bank wire transfer "*

577. In this case, the payment to be made by the Respondent in each case corresponds to a portion of the Price of the Contract, or other concepts, and not to the Termination Value; and the Financial Expenses payable as a consequence of the nonpayment are regulated by Clause 10.2 of the Contract, which states:

*" **10.2 Financial Expenses.** In the event that any part of the Price of the Contract, any Termination Value or any other amount payable under this Agreement is not paid when due, upon demand of the Contractor or the Commission, as the case may be, the Commission or the Contractor, as the case may be, shall pay Financial Expenses at the Financial Expense Rate, and such expenses shall begin to accrue when the Parties have defined the amount to be paid, which*

shall be calculated on the unpaid amounts and shall be computed per Days from the time they are determined until the date on which the amounts are made available to the Contractor or to the Commission, as the case may be... " [Emphasis added by the Tribunal].

578. With regard to the foregoing clause, in accordance with the definitions contained in Clause 1.1 of the Contract, Day *"means 1 (one) calendar Day"*; and, with respect to the Financial Expense Rate:

"Financial Expense Rate" means (a) with respect to amounts in Pesos. A rate equal to the rate established in the Federal Revenue Law in cases involving extensions for the payment of tax credits, as set forth in Article 55 of the Law of Public Services and Related Services [LOPSRM], and (b) with respect to amounts in Dollars, the weighted average cost of debt in Dollars prevailing at that time, in accordance with the Financial Agreements (but excluding any default interest or interest for breach), plus 1% (one percentage point), as set forth in the certificate issued by the external auditors of the Contractor who shall provide such certificate to the Commission no later than 90 (ninety) Days after the signature of the Contract. In the event that such certificate has not been provided to the Commission by the Contractor, the rate resulting from the arithmetic average of the 6 (six) Month LIBOR (London Interbank Offered Rate) rate at the close of each Day, for the period from the Day on which the obligation to make the corresponding payment is due, up to 2 (two) Days immediately prior to the date on which the payment is made, according to the Reuters Services quotation, plus 1% (one percentage point), shall be applied instead of the Rate indicated in subsection b)." [Emphasis added by the Tribunal]

579. Finally, to determine the Financial Expense Rate, defined as above, it should be considered that:

"Financing Agreements" means all agreements, promissory notes, guarantee agreements, mortgages and other documents relating to the financing of the Works, including any amendments, extensions, renewals, refinancings and replacements related thereto, but excluding those relating to financing granted by any of the Participants or any of their Affiliates."

Empalme's Position

580. Empalme's position in that regard is brief and is reduced to stating that *"In addition to what is stated in this memorial, [the Statement of Claim] the Claimant requests, with respect to each of the payment judgments imposed upon CFE, that the members of the Tribunal take into consideration the provisions of clause 10.2 of the Contract, which establishes the basis*

for quantifying the Financial Costs that will accrue on any sum that is not timely paid,"⁴⁴⁴ ... "Order CFE to pay Financial Costs when applicable "⁴⁴⁵ and " ... reiterates that on each payment judgment imposed on CFE corresponding to costs and expenses, the financial costs calculated in accordance with the provisions of Clause 10.2 of the Contract [which it cites as a footnote, with other references] must be paid. The appropriateness of the application of the financial expenses is not disputed by CFE; on the contrary, it was acknowledged by Mr. Cámara during the Hearing."⁴⁴⁶

CFE's Position

581. CFE's position with regard to Financial Expenses is even more concise since in its extensive Statement of Defense it denies all the payment claims formulated by Empalme and consequently does not make any direct allusion to Financial Expenses and, among other claims, it limits itself generically to requesting that the Arbitral Tribunal *"dismiss the claim ordering CFE to pay the amounts presented by the Claimant since they are inadmissible and that may eventually [be] derived from the memorials presented during the arbitration proceedings for failure to do so at the time established in the Litis."*⁴⁴⁷ CFE makes the same statement in its Pre-Hearing Brief⁴⁴⁸ and also fails in its Closing Memorial to dispute the claims raised by the Claimant under the heading of Financial Expenses and limits itself to requesting that *"Claimant's claims other than the one that the Commission has accepted for payment be dismissed."*⁴⁴⁹

Analysis of the Arbitral Tribunal

582. In light of the foregoing, and since there is no dispute regarding the appropriateness of the collection of Financial Expenses when an amount owed is past due and has not been paid, it may be concluded that (1) the payment of Financial Expenses is appropriate in the case of those amounts with respect to which *the Commission has accepted payment,*⁴⁵⁰ and (2) payment of Financial Expenses is also appropriate in the case of those amounts challenged by CFE with respect to which the Tribunal has ruled that payment is appropriate.

⁴⁴⁴ Statement of Claim, ¶ 1075

⁴⁴⁵ Empalme's Pre-Hearing Brief, "186 (Empalme's Claims), paragraph I.

⁴⁴⁶ Empalme's Closing Memorial, ¶121. The Claimant refers on this point to ¶ 27 of the same Memorial, but there it does not specify the location of the acknowledgment attributed to Mr. Cámara.

⁴⁴⁷ Statement of Defense, ¶ 2456 (Claims), paragraph H.

⁴⁴⁸ CFE's Pre-Hearing Brief, ¶ 72 (Claims), paragraph I.

⁴⁴⁹ CFE's Closing Memorial, Chapter XII ("PETITIONS"), ONE.

⁴⁵⁰ *Ibid.*

583. Notwithstanding the above paragraph, which refers to Financial Expenses in general, the extreme generality and lack of argument characterizing the submissions of both Parties in their various memorials, as evidenced by their respective positions, seriously hampers the Tribunal's ability to determine (1) to which payment obligations Financial Expenses are applicable in the event of default; (2) the date on which Financial Expenses should begin to accrue depending on the type of default; and (3) the applicable interest rate, depending on the applicable assumption under the aforementioned definition of "Financial Expense Rate".
584. Consequently, in view of the existence of the issue mentioned in previous paragraphs, attributable to the omissions of the Parties when formulating their claims with regard to Financial Expenses, in the following sections, the Tribunal analyzes the issues referred to in previous pages of this Award, regarding which the Tribunal has considered the Claimant's claims and the respective payment to be admissible, in order to resolve the relevant issues with regard to the Financial Expenses claimed by the Claimant.

Repayment of the Enforced Amount of the HSBC Letter of Credit

585. Although in this Award the Tribunal ruled that the enforcement by CFE of the HSBC Letter of Credit was in violation of the Contract and that the violation in question was particularly serious,⁴⁵¹ regardless of the fact that as a consequence of such violation the reimbursement of the Enforced Amount thereof, in other words, the total amount of USD \$ 13,627,892.00 dollars, the Tribunal believes it is inappropriate to order CFE to pay Financial Expenses on that amount, since Empalme did not restore the Enforced Amount.
586. Although payment of Financial Expenses on the Enforced Amount of the HSBC Letter of Credit is not appropriate for the reasons stated above, the Tribunal rules that the Respondent must reimburse the Claimant the amount of USD \$ 13,627,892.00 dollars within 30 (thirty) Days following the date on which it receives notice of this Final Award from the LCIA.

HSBC Letter of Credit Enforcement Costs

587. Furthermore, the Claimant incurred expenses related to the enforcement of the HSBC Letter of Credit, totaling USD \$51,195.45, of which USD \$37,762.14 corresponds to the

⁴⁵¹ Paragraphs 244 and 245, among others, of this Final Award.

commission charged by the issuing entity (HSBC) and USD \$13,433.31 corresponds to SWIFT expenses.

588. Since the expenses referred to in the preceding paragraph were a consequence of the enforcement of the HSBC Letter of Credit, which was in violation of the Contract, the Tribunal also determines that, although the payment of Financial Expenses on the amount of such expenses is inappropriate for the reasons stated above, the Respondent must pay the Claimant the total amount of USD \$ 51,195.45 dollars within 30 (thirty) days following the date on which it receives notice of this Final Award from the LCIA.⁴⁵²

Reimbursement of withholding under the Fifth Amendment Agreement

589. Regarding Claimant's claim for reimbursement of the amount of USD \$337,128.97 dollars, withheld by CFE from Empalme pursuant to Clause Three of the Fifth Amendment Agreement, corresponding to unrecognized work progress, the Tribunal has concluded that since the Provisional Acceptance Certificate was issued on March 26, 2019, Empalme was released from performing the pending tests under the terms of the Contract, with the corresponding consequences that include, among others, CFE's obligation to reimburse the aforementioned amount to Empalme.
590. Consequently, the Respondent must reimburse the total amount of USD \$ 337,128.97 dollars to the Claimant within 30 (thirty) Days following the date on which it receives notice of this Final Award from the LCIA.⁴⁵³
591. Furthermore, by virtue of Respondent's failure to reimburse the withheld amount to Empalme after the Claimant was released from the obligation to perform the tests and therefore the respective withholding ceased to be justified, the Tribunal also determines that the Respondent shall pay Empalme the Financial Expenses corresponding to the amount of USD \$ 337,128.97 dollars, as of March 27, 2019, the day following the date of the issuance of the Provisional Acceptance Certificate, applying the Financial Expense Rate defined above.

Additional Work

592. With respect to this concept, the Claimant has claimed payment for certain additional works,

⁴⁵² Paragraphs 248 and 249 of this Final Award.

⁴⁵³ Paragraph 504 of this Final Award.

not covered by the Contract which were performed by Empalme; of which: (a) the most

important consisted of civil works for soil improvement in the area of GVRC equipment number 1; and (b) the increase in the length of the pilings for the foundations of the Power Plant. The total cost of these works was USD \$3,348,527.30, of which the amount of USD \$937,921.76 corresponded to the soil improvement works and USD \$2,410,605.54 corresponded to the cost of increasing the length of the pilings.

593. The Tribunal determined that the works in question were not included in the scope of the Contract but were performed based on the Respondent's decision to change the site and consequently the cost of such works must be covered by the Respondent; therefore, CFE must pay Empalme the total amount of USD \$ 3,348,527.30 dollars within 30 (thirty) Days following the date on which it receives notice of this Final Award from the LCIA.⁴⁵⁴
594. Likewise, by virtue of Respondent's failure to pay for the Additional Work described above, the Tribunal also determines that Respondent shall pay Financial Expenses to Empalme in the amount of USD \$ 3,348,527.30 dollars, as of the day following the date of the conclusion of the referred work, at the Financial Expenses Rate defined above.

Additional Recognized Work

595. The Claimant also claimed payment of certain additional works not covered by the Contract at a total cost of USD \$109,299.58 dollars, which were performed by Empalme; which include the following: (a) the fast transfer implementation works at a cost of USD \$100,713.46 dollars; and (b) the Power Plant island mode implementation works at a cost of USD \$8,586.12 dollars.
596. The Tribunal determined that, taking into account that an agreement exists between the Parties with respect to payment by CFE for the aforementioned works, the works must be considered to have been accepted and pending payment by CFE; therefore, the Tribunal also determines that CFE must pay Empalme the total amount of USD \$109,299.58 dollars within 30 (thirty) days following the date on which it receives notice of this Final Award from the LCIA.⁴⁵⁵

⁴⁵⁴ Paragraphs 523 to 525 of this Final Award.

⁴⁵⁵ Paragraph 506 of this Final Award.

597. Likewise, by virtue of the Respondent's failure to pay the amount of the Additional Recognized Works specified above, the Tribunal also determines that the Respondent shall

pay Financial Expenses to Empalme in the amount of USD \$109,299.58 dollars, as of the day following the date of the completion of the referred works, at the Financial Expenses Rate defined above.

The 25.5 Agreement / Personnel management and office administration

598. The Tribunal noted that under paragraph 3.3 of the 25.5 Agreement there is an acknowledgement by the Respondent regarding CFE's obligation to pay Empalme a total of USD \$6,950,822.24 for personnel management and field office administration, plus its financial costs at the financial expense rate, in the amount of USD \$163,861.91, however both amounts remain unpaid by CFE and are included in Empalme's claims.⁴⁵⁶

599. The Tribunal rules that, since the Respondent has acknowledged CFE's obligation to pay the amounts referred to in the preceding paragraph, and nevertheless the respective payment is still pending, CFE must pay the following amounts to Empalme within 30 (thirty) days following the date on which it receives notice of this Final Award from the LCIA:

- a. USD \$6,950,822.24 for personnel management and field office administration; and,
- b. USD \$163,861.91 dollars for financial costs applicable to the nonpayment of the above amount, at the financial expense rate.

600. Furthermore, by virtue of Respondent's failure to pay the above amounts, the Tribunal also determines that the Respondent shall Financial Expenses to Empalme on both amounts as of July 10, 2020, the day after the date on which Empalme delivered invoice PCE150406E65, Folio 43,⁴⁵⁷ at Financial Expense Rate defined above.

Costs associated with testing, Clause Three of the Fifth Amendment Agreement

⁴⁵⁶ Paragraph 558 of this Award; Statement of Defense, ¶¶ 2354 and 2355; Exhibit A-032 to Statement of Claim; Minutes of acknowledgment of reimbursement of expenses, dated June 24, 2020.

⁴⁵⁷ Exhibit A-032 to the Statement of Claim.

601. The Arbitral Tribunal has considered the viewpoints of both Parties⁴⁵⁸ as well as the opinions of their respective experts; and also taking into account the position of CFE by reiterating that "*.... it is not possible to recognize any type of reasonable and documented expenses incurred by the Contractor related to the Works under the terms of the Fifth Amendment Agreement, due to the fact that the Contractor did not comply with its obligations agreed upon in the aforementioned Amendment Agreement,*"⁴⁵⁹ was unjustified in not recognizing the totality of the costs incurred by Empalme associated with the performance of tests, while it determined that Empalme's claim was partially justified; the Tribunal accepts to that effect the itemization presented by expert Cámara Anzures,⁴⁶⁰ according to which the costs associated with conducting tests incurred by Empalme during the period between May 27, 2019 and September 26, 2019, total USD \$1,214,852.45 USD, and the Tribunal rules that they should be covered by the Respondent.⁴⁶¹
602. Consequently, by virtue of the foregoing, the Tribunal rules that the Respondent must pay the Claimant a total of USD \$1,214,852.45 dollars; likewise, the nonpayment of that amount by CFE makes the payment of Financial Expenses appropriate.
603. However, considering also that in light of all the previous rulings issued by the Tribunal in this Final Award, there are also balances in CFE's favor for other concepts, the Tribunal rules in that regard that the Parties must proceed to offset their respective credits and CFE must pay Empalme the balance owed by CFE within 30 (thirty) days following the date on which it receives notice of this Final Award from the LCIA; CFE shall pay Financial Expenses on the balance payable by CFE, as of September 27, 2019, the day following the end of the period regarding which the aforementioned associated expenses were considered, at the Financial Expense Rate defined above.

XIII. ARBITRATION COSTS

604. In their Closing Memorials, the Parties formulated their respective claims regarding the "Arbitration Costs" and "Legal Costs" referred to in Articles 28.1 and 28.3 of the Rules,

⁴⁵⁸ Statement of Claim, ¶¶ 1019 and 1028; Empalme's Closing Memorial, ¶¶ 41-45; Statement of Defense, ¶¶ 2380 and 2381; GPS Expert Report I, section 6.2.2, ¶¶ 201-206; Expert Report of Mr. Camara Anzures, ¶¶ 865, 923-929, 931.

⁴⁵⁹ CFE Official Correspondence RGROS-123/2020 dated May 21, 2020, Exhibit A-090 to the Statement of Claim.

⁴⁶⁰ Cámara Anzures Expert Report, ¶ 932.

⁴⁶¹ Paragraphs 534 to 538 of this Final Award;

under the terms expressed by each Party in those Memorials, which are summarized below:

Empalme's Position

605. The Claimant states that in the absence of an agreement between the Parties on the distribution of costs, in accordance with the Rules, the Tribunal is responsible to establish the resulting costs award, and it makes various statements regarding the circumstances that it believes the Tribunal should take into consideration for that purpose, and lists the amounts to which Empalme claims it is entitled, which are summarized below, stating that the respective costs and expenses should be covered by CFE, which should also pay financial expenses on the corresponding amount, calculated in accordance with Clause 10.2 of the Contract.⁴⁶²

a) Legal fees charged by Galicia Abogados, S.C.

From the beginning of the representation to the conclusion of the Hearing:	MXN \$9,968,207.00
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Estimated success premium based on the amount in dispute:	USD \$748,110.30
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b) <u>LCIA Payments</u> . ⁴⁶³	GBP £254,750.00
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c) Expert report fees

GPS Expert Reports I and II (A-001 and AP.002). ⁴⁶⁴	USD \$352,109.89
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Opinion C. Lappee (AP-003):	EUR €65,300.00
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H2O Opinion (AP-004):	EUR €43,050.00
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d) Hearing expenses

Visual communication presentation for Hearing:	MXN \$94,500.00
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Food service during the Hearing:	MXN \$74,040.00
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Stenography service during the Hearing:	MXN \$28,750.00
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⁴⁶² Empalme's Closing Memorial, 117-121.

⁴⁶³ Includes registration, Emergency Arbitrator fees, LCIA fees and Arbitral Tribunal fees.

⁴⁶⁴ Includes GPS Expert Report I, GPS Expert Report II, Hearing and Hearing expenses to be reimbursed.

Hearing Management Services (ICC):	EUR €2,500.00
	MXN\$142,222.54
Transportation and lodging for experts and witnesses:	EUR €2,482.00

e) Other costs for enforcement of HSBC Letter of Credit,

Emergency Arbitration and Arbitration

Translation of Expert reports AP-003 and AP-004:	MXN \$215,074.00
OHL-SENERMEX Guarantors:	USD \$1,692,506.43

Internal costs

Travel of Empalme officials for Hearing:	EUR €8,077.12
Response to arbitration by Empalme personnel: ⁴⁶⁵	MXN \$32,510,082.14

CFE'S Position

606. The Respondent's submission is extremely brief and is limited to the explanation of each of the items for which costs are claimed and which are summarized below, to which it adds "*the costs being generated by the processing of this Arbitration*", which by its nature it does not quantify, and the request that "*.... the Arbitral Tribunal order the Claimants (sic) to pay all the costs for legal representation and arbitration costs incurred by the Commission in the proportional part of those claims that are denied due to lack of legal action to exercise them*".⁴⁶⁶

a) Provision of professional services:	MXN \$2'897,937.45*
b) Expert Report of Lorenzo José Cámara Anzures:	MXN \$7'430,000.00*
c) Hearing Videorecording and Transcript:	MXN \$28,750.00
d) Simultaneous translation and interpretation at Hearing:	MXN \$42,500.00

⁴⁶⁵ Footnote to EMPALME'S Closing Memorial in the table at ¶ 123: "*These costs correspond to the hours dedicated by EMPALME personnel in the follow-up and preparation of the Arbitration. These costs were determined based on the formulas (sic) and hourly costs of each of the consortium companies.*"

⁴⁶⁶ CFE's Closing Memorial, ¶¶ 167-1172 and Second Petition.

e) LCIA administrative costs: GBP £208,000.00

*Value added tax (VAT) must be added to this amount.

Determination of the Arbitral Tribunal

607. The Arbitral Tribunal has taken into account the representations and claims made by the Parties in Empalme's Closing Memorial and in CFE's Closing Memorial, with regard to the "Arbitration Costs" and "Legal Costs" referred to in Articles 28.1 and 28.3 of the Rules; and also, in compliance with the provisions of Article 28.4 of the latter, the Tribunal has taken into account the general principle that costs should reflect the relative success or failure of the Parties, and the Arbitral Tribunal has also taken into account the conduct of the Parties in the arbitration and their cooperation in the proceedings.
608. As may be seen from the Closing Memorials of the Parties, the "Arbitration Costs" referred to in Articles 28.1 and other applicable Articles of the Rules total GBP £462,750.00 (four hundred sixty-two thousand, seven hundred fifty pounds sterling), since Empalme quantified the claimed "Arbitration Costs" at GBP £254,750.00 (two hundred fifty thousand, seven hundred fifty pounds sterling), and CFE quantified its own costs at GBP £208,000.00 (two hundred eight thousand pounds sterling).
609. In connection with the foregoing, the Arbitral Tribunal has taken into consideration the fact that the conduct observed by the Respondent in this case toward the Claimant in this case in connection with the various issues arising out of the Parties' contractual relationship, and particularly CFE's rejection of the payment requests made by Empalme in connection with the services provided by the latter pursuant to the Contract, and the unilateral enforcement of the HSBC Letter of Credit, forced Empalme to file its Request for Arbitration and to formulate its Petition for Emergency Measures, not only to enforce its rights through the former, but also to prevent, through the latter, additional affectations to those already suffered by Empalme due to the enforcement of the HSBC Letter of Credit by CFE.
610. Likewise, with regard to the actions taken by the Claimant, referred to in the previous paragraph, the Arbitral Tribunal notes that Empalme substantially prevailed in the Emergency Proceedings and, furthermore, the Interim Measures granted to Empalme in the Emergency Arbitrator's Award were upheld by the Arbitral Tribunal, as part of the proceedings relating to this arbitration, under the terms of Procedural Order No. 2, referred to in this Final Award.
611. Finally, as regards the conduct of the Parties in the arbitration and their cooperation in the proceedings, the Tribunal considers that both conducted themselves appropriately and each asserted their respective rights and points of view in good faith and in a reasonable manner,

and both observed a cooperative attitude with regard to the determinations and provisions of the Arbitral Tribunal.

612. In addition to the foregoing, it has been evidenced, in accordance with the proceedings relating to the disputed issues to be resolved in connection with the claims of the Parties,⁴⁶⁷ that the Claimant was substantially successful in the arbitration since it fully or partially prevailed in most of the claims raised in its Pleadings, as evidenced by the Tribunal's findings in that regard in the various chapters and sections of this Final Award. In that regard, the provisions of Article 28.4 of the Rules are applicable in this case, which provides that the Tribunal "... shall decide on both Arbitration Costs and Legal Costs on the general principle that costs should reflect the relative success and failure of the parties to the award, the arbitration or other matters, unless the Arbitral Tribunal considers, under the circumstances, that the application of such general principle would be inappropriate. ..." The Tribunal identifies no reason to depart from this principle.
613. On the other hand, the Tribunal is aware that it is very difficult to make an arithmetical allocation of costs between the parties taking into account the different factors mentioned above.
614. Considering all of the foregoing factors, the Arbitral Tribunal rules and decides, with respect to the "Arbitration Costs" and "Legal Costs" referred to in Articles 28.1 and 28.2 of the Rules, that the Respondent shall absorb 80% (eighty percent) of the costs and the Claimant shall absorb 20% (twenty percent) of the costs.
615. The net Arbitration Costs (other than Legal Costs or other costs incurred by the Parties at their own expense) have been determined by the LCIA Tribunal, pursuant to Article 28.1 of the Arbitration Rules, as follows:

Registration Fee:	GBP £1,750
Emergency Arbitrator Application Registration Fee:	GBP £8,000
Emergency Arbitrator Fees:	GBP £20,000
LCIA Administrative Costs:	GBP £41,177.16
Fees and expenses of the Tribunal:	GBP £349,868.94
Total arbitration costs:	GBP £420,796.10
These fees and expenses are subject to VAT.	

⁴⁶⁷ Chapter XI of this Final Award (DISPUTED ISSUES TO BE RESOLVED).

616. Of these costs, the Claimant has paid GBP £255,573.85, which includes the Registration Fee, the Emergency Arbitrator Application Registration Fee, deposits transferred, and accrued interest and the Respondent has paid GBP £225,823.85, which includes deposits transferred, and accrued interest. Therefore, a total of £481,397.70 has been received from the Parties, of which £420,796.10, plus VAT in the amount of £60,601.60, has been used to pay the Arbitration Costs. Any remaining funds will be returned by the LCIA to the Parties in the proportions in which they were paid, in accordance with Article 28.7 of the Arbitration Rules.
617. As to the "Legal Costs" referred to in Articles 28.3 and other applicable articles of the Rules, which are specified in Empalme's Closing Memorial of Empalme and in CFE's Closing Memorial, as decided in the preceding paragraphs, the Respondent shall pay Empalme 80% (eighty percent) of the costs claimed by the Claimant in its Closing Memorial;⁴⁶⁸ however, the Tribunal rules that, in addition to not having been accredited, they are not reasonable and therefore are improper and rejects the "*internal costs*" claimed by the Claimant for "*Internal costs corresponding to the resolution of the Arbitration by Empalme's personnel and the members of its consortium*"⁴⁶⁹ and likewise rejects the Claimant's claim⁴⁷⁰ that CFE should pay Financial Expenses on the awards imposed on the Respondent for Arbitration Costs and Legal Costs.

XIV. DECISION

618. For the foregoing reasons, the Tribunal rules as follows:
- A) With respect to the expiration of the Operational Warranty stipulated in Clause 20.1 of the Contract, the Tribunal rules that the expiration date was July 2, 2019.
 - B) Regarding the enforcement by the Respondent of the HSBC Letter of Credit, the Tribunal rules that the Federal Electricity Commission enforced it in violation of the provisions of

⁴⁶⁸ Empalme's Closing Memorial, paragraph 121 and, in addition, only the concept contained in the first table of the table that forms part of ¶ 123 of that Memorial.

⁴⁶⁹ Empalme's Closing Memorial, second table in the table at ¶ 123 of that Memorial.

⁴⁷⁰ Empalme's Closing Memorial, ¶ 121.

the Contract. Consequently, the Respondent shall reimburse the amount of USD \$13,627,892.00 (Thirteen million six hundred twenty-seven thousand eight hundred ninety-two dollars 00/100), legal tender of the United States of America, to Proyecto CCC Empalme I, S.A.P.I. de C.V.

- C) With respect to the claim of Proyecto CCC Empalme I, S.A.P.I. de C.V. that the expenses inherent to the improper enforcement of the HSBC Letter of Credit by the Federal Electricity Commission should be covered, the Tribunal resolves in line with the foregoing that the Respondent shall pay the Claimant the amount of USD \$51,195.45 (Fifty-one thousand one hundred ninety-five and 45/100 dollars), legal tender of the United States of America, for the enforcement fee (USD \$37,762.14 dollars), and SWIFT expenses incurred in the amount of (USD \$13,433.31 dollars).
- D) The costs claimed by Proyecto CCC Empalme I, S.A.P.I. de C.V. identified as non-compliance guarantees and accrued but unpaid interest in the amount of USD \$1,692,506.43 are rejected as inadmissible.
- E) With regard to the Federal Electricity Commission's claim that Proyecto CCC Empalme I, S.A.P.I. de C.V. failed to comply with its obligations to address the Minor Defects, the Tribunal rules that the Claimant complied with its obligations to resolve the Minor Defects, with the exception of those listed in the following paragraph.
- F) The Tribunal rules that the Minor Defects that are still pending resolution by Proyecto CCC Empalme I, S.A.P.I. de C.V. are those identified as MD-45, MD-49, MD-321, MD-322, MD-338, MD-345, MD-352, MD-353, MD-399, MD-416, MD-436, MD-437, MD-448, MD-453, MD-457, MD-474, MD-475, MD-487, MD-517, MD-532, MD-535, MD-547, MD-554, MD-556, MD-558, MD-559 and MD-571, for a total value of USD \$819,828.81 (Eight hundred nineteen thousand, eight hundred twenty-eight United States dollars and 81/100), legal tender of the United States of America.
- G) With respect to the Warranty Claims that the Federal Electricity Commission indicates were not resolved by Proyecto CCC Empalme I, S.A.P.I. de C.V., the Tribunal rules that the Claimant complied with its obligations to resolve the claims, with the exception of those listed in the following paragraph.

- H) The Tribunal rules that 10 (ten) Warranty Claims identified as WC-19, WC-21, WC-22, WC-24, WC-82, WC-180, WC-181, WC-182 and WC-183 are still pending resolution by Proyecto CCC Empalme I, S.A.P.I. de C.V., for a total value of USD \$31,466.78 (Thirty-one thousand, four hundred sixty-six United States dollars and 78/100), legal tender of the United States of America, remain pending.
- I) With respect to the claim of Proyecto CCC Empalme I, S.A.P.I. de C.V. that the Federal Electricity Commission must reimburse it for the amount withheld upon signature of the Fifth Amendment Agreement, the Tribunal rules that the Respondent must deliver to the Claimant the amount of USD \$337,128.97 (Three hundred thirty-seven thousand, one hundred twenty-eight United States dollars and 97/100), legal tender of the United States of America.
- J) Regarding the claim of Proyecto CCC Empalme I, S.A.P.I. de C.V. that it be paid the costs of the additional works incurred due to the improvement of the soil in the area of GVRC equipment number 1 and the increase in the length of the pilings for the foundations of the Power Plant equipment, the Tribunal rules that the Federal Electricity Commission shall pay the Claimant a total of USD \$3,348,527.30 (Three million, three hundred forty-eight thousand, five hundred twenty-seven United States dollars and 30/100), legal tender of the United States of America).
- K) In addition to the ruling set forth in the preceding paragraph, the Tribunal rules that the Federal Electricity Commission shall pay the Claimant a total of USD \$109,299.58 (One hundred nine thousand, two hundred ninety-nine United States dollars and 58/100), legal tender of the United States of America, which the Respondent has acknowledged that it owes to the Claimant for works related to the island mode of the Power Plant and the implementation of the medium voltage fast transfer.
- L) In addition to the foregoing, the Federal Electricity Commission shall pay the Claimant the amount of USD \$7,114,684.15 (Seven million, one hundred fourteen thousand, six hundred eighty-four United States dollars and 15/100), legal tender of the United States of America, for personnel management and field office administration (USD \$6,950,822.24 dollars) plus its financial costs at the agreed rate (USD \$163,861.91 dollars) that the Respondent has acknowledged that it owes to the Claimant under the terms of the 25.5 Agreement, Paragraph 3.2.

- M) In connection with the claim of Proyecto CCC Empalme I, S.A.P.I. de C.V. for the costs associated with the Performance Tests, the Tribunal rules that the Federal Electricity Commission shall pay the Claimant a total of USD \$1,214,852.45 (One million, two hundred fourteen thousand, eight hundred fifty-two United States dollars and 45/100), legal tender of the United States of America.
- N) With respect to the claim of Proyecto CCC Empalme I, S.A.P.I. de C.V. to recover the costs derived from the third party claims under the 25.5 Agreement, the Tribunal rules that the claim is not admissible.
- O) Regarding the request of Proyecto CCC Empalme I, S.A.P.I. de C.V. to bifurcate the proceedings and declare the termination of the Contract to be appropriate, granting the Final Delivery Certificate and the corresponding Closing Statement, the Tribunal rejects the request as inadmissible.
- P) With regard to the petitions for a judgment on the costs of this arbitration raised by Proyecto CCC Empalme I, S.A.P.I. de C.V. and by the Federal Electricity Commission, the Tribunal orders the Federal Electricity Commission to pay a total of GBP £204,459.08 (two hundred four thousand, four hundred fifty-nine pounds sterling and 08/100), equivalent to 80% (eighty percent) of the total Arbitration Costs referred to above, which were paid by Empalme to the London Court of International Arbitration.
- Q) The Federal Electricity Commission shall pay Empalme 80% (eighty percent) of the Legal Costs referred to in paragraph 616 of Chapter XIII above, with the exception of the Legal Costs sought by the Claimant and specified in the following paragraph.
- R) The Claimant's claim that Respondent should pay to Empalme, as part of the Legal Costs referred to above, the "*internal costs*" claimed by the Claimant for "*response to the Arbitration by personnel of Empalme and its consortium members*", associated with the time spent by executives, administrative personnel, research personnel, the advisory services of the internal legal team, administration of the proceedings, as well as the participation of witnesses in the arbitration, is rejected.

- S) Finally, Empalme's claim that CFE should pay Financial Expenses on the judgments imposed on the Respondent for Arbitration Costs and Legal Costs is rejected.
- T) Recapitulating the judgments set forth above, the Federal Electricity Commission is ordered to pay the following amounts to Proyecto CCC Empalme I, S.A.P.I. de C.V.:

a) Refund for the HSBC Letter of Credit:	USD \$ 13,627,892.00
b) Expenses for the execution of the HSBC Letter of Credit:	USD \$ 51,195.45
c) Reimbursement withholding Fifth Amendment Agreement:	USD \$ 337,128.97
d) Additional Work:	USD \$ 3,348,527.30
e) Additional Recognized Work:	USD \$ 109,299.58
f) Personnel management-office administration:	USD \$ 6,950,822.24
g) Financial costs related to The 25.5 Agreement:	USD \$ 163,861.91
h) Costs Associated with Tests in accordance with the Fifth Amendment Agreement:	USD \$ 1,214,852.45
i) Arbitration Costs:	GBP 204,459.08
j) Legal Costs:	USD \$ 880,176.15 EUR € 97,127.30 MXN \$ 8'418,235.82
The above amounts payable by the Respondent are reduced by the following amounts payable by the Claimant:	
1) Minor Defects:	USD \$ 819,828.81
2) Warranty Claims:	USD \$ 31,466.78

- U) Failure to timely pay the amounts indicated in the preceding paragraphs shall result in the accrual of Financial Expenses until the date of payment, at the Financial Expense Rate defined in this Final Award.
- V) All remaining claims and petitions are denied.

Seat of the Arbitration: Mexico City.

Date: March 14, 2023

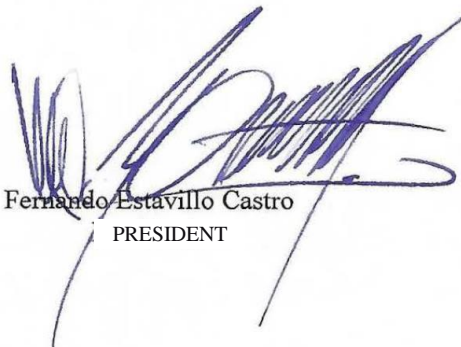
ARBITRAL TRIBUNAL



Eduardo Siqueiros Twomey
ARBITRATOR



Oscar Vásquez del Mercado Cordero
ARBITRATOR



Fernando Estavillo Castro
PRESIDENT

THE STATE OF TEXAS }
 }
COUNTY OF HARRIS }

AFFIDAVIT OF ACCURACY

BEFORE ME, the undersigned authority, on this day personally appeared Ana Cristina Didoné, who, by oath and by presentation of identification, is personally known to me to be the person subscribing her name below and, after being by me duly sworn according to law, upon her oath deposes and says in due form of law that to the best of her knowledge, information and belief:

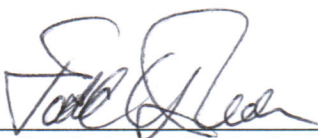
1. "My name is Ana Cristina Didoné and I am over the age of twenty-one years and competent to make this affidavit.
2. I speak, read, and write fluently in both the English and Spanish languages.
3. I have been a certified sworn translator since 1988 with a M.A. in Legal Translations from the University of Salvador, Argentina. I am certified by the Argentine Association of Sworn Public Translators to translate from English into Spanish and Spanish into English. I am also certified by the American Translators Association for English to Spanish translations. I hold a degree in Executive Business Management from Rice University.

I hereby certify that the Spanish to English translation attached hereto: "*Laudo final - Proyecto CCC Empalme I, S.A.P.I. de C.V. c/ Comisión Federal de Electricidad*" is true, correct, fair, accurate and complete English translation to the best of my ability, of the original document in Spanish.

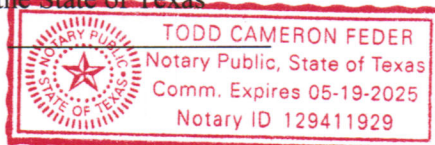


ANA CRISTINA DIDONÉ, MA
Certified by American Translators Association

Sworn to before me this 23rd day of October 2023



Notary Public in and for the State of Texas
My commission expires:



LONDON COURT OF INTERNATIONAL ARBITRATION
(LCIA)

Caso No. 204661

Proyecto CCC Empalme I, S.A.P.I. de C.V.

c/

Comisión Federal de Electricidad

LAUDO FINAL

14 de marzo de 2023.

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Lista de Abreviaturas

General

Demandada, Comisión o CFE	Comisión Federal de Electricidad.
Demandante, Contratista o Empalme	Proyecto CCC Empalme I, S.A.P.I. de C.V., identificada como “Contratista” en el Contrato que abajo se define y por tanto así referida en diversas citas.
LCIA	London Court of International Arbitration.
Ley de Obras Públicas o LOPSRM	Ley de Obras Públicas y Servicios Relacionados con las Mismas publicada en el Diario Oficial de la Federación de fecha 4 de enero de 2000, con sus reformas hasta la fecha del Contrato que abajo se define.
Reglamento	Reglamento de Arbitraje LCIA, en vigor a partir del 1 de octubre de 2014.

Marco contractual

Aceptación Provisional	Aceptación provisional de la Central por CFE, de conformidad con la Cláusula 18.1 del Contrato, después de la terminación de las Obras, al concluir la verificación física de las Obras por Empalme y CFE, en concordancia con los alcances y Especificaciones del Contrato, con posterioridad a la elaboración de un acta circunstanciada con los resultados de la verificación, incluyendo una relación de las Deficiencias Menores, en su caso (Cláusulas 1.1 y 18.1 del Contrato).
Acta de Aceptación Provisional	Acta circunstanciada elaborada por CFE y Empalme con fecha 26 de marzo de 2019 al concluir la verificación de la Central con motivo de la terminación de las Obras, para dejar constancia de los resultados de la verificación, incluyendo una relación de las Deficiencias Menores (Cláusula 18.1 del Contrato).
Acuerdo 25.5	Acuerdo entre las Partes sobre la Aplicación de la Cláusula 25.5 para Cumplir el Objeto del Contrato PIF-017/2015, celebrado entre CFE y Empalme el 16 de enero de 2019, en relación con la compensación a Empalme con motivo del retraso en la Fecha Programada de Aceptación Provisional, por causas de Fuerza

Mayor Gubernamental consistentes en restricciones del Centro Nacional de Control de Energía (CENACE) para realizar pruebas al 100% de carga.

Ampliación del Período de Garantía

Prolongación automática del Período de Garantía, en los términos de la Cláusula 20.4 del Contrato, en caso de que la Central no pueda generar energía eléctrica debido a un Defecto o Desperfecto, por un período igual al tiempo en que la Central, o la parte correspondiente, no pueda ser utiliz por la Comisión.

Carta de Crédito Banorte

Carta de crédito irrevocable *standby* No. S002439 de fecha 13 de marzo de 2019, emitida por Banco Mercantil del Norte, S.A., Institución de Banca Múltiple, Grupo Financiero Banorte con cargo a Empalme por la cantidad de USD 47'684,436.92 dólares, moneda de los Estados Unidos de América, como la misma puede ser incrementada de acuerdo con los términos ahí establecidos, entregada por Empalme a CFE de conformidad con la Cláusula 11.1 b) del Contrato en garantía de las obligaciones a cargo de Empalme respecto a la reparación de vicios ocultos o defectos de los materiales y obras, así como así como de cualquier otra responsabilidad en que hubiere incurrido Empalme, derivada del Contrato.

Carta de Crédito HSBC

Carta de crédito irrevocable *standby* No. SDNMLM550040 de fecha 10 de abril de 2015, emitida por HSBC México, S.A., Institución de Banca Múltiple, Grupo Financiero HSBC con cargo a Empalme por la cantidad de USD 47'684,436.92 dólares, moneda de los Estados Unidos de América, equivalente al 10% del Precio del Contrato, entregada por Empalme a CFE de conformidad con la Cláusula 11.1 a) del Contrato para garantizar a esta el debido, propio y absoluto cumplimiento de las obligaciones objeto de la Garantía de Cumplimiento que abajo se define.

CCI

Significa Cámara de Comercio Internacional, que es su denominación en español, o *International Chamber of Commerce* (ICC).

Central

El conjunto de instalaciones y Equipos que forman parte del alcance del Contrato (Cláusula 1.1 del Contrato).

Certificado de Aceptación Provisional

Certificado emitido por CFE con fecha 26 de marzo de 2019 para establecer la Aceptación Provisional de la Central una vez suscrita el Acta de Aceptación Provisional, que incluyó una relación de las Deficiencias Menores, dejando constancia de que, al momento

de la emisión de dicho Certificado, el cuidado, custodia y control de la Central, así como el riesgo de su pérdida, fueron transferidos a CFE (Cláusulas 1.1 y 18.1 del Contrato).

Contrato	Contrato de Obra Pública a Precio Alzado de fecha 15 de abril de 2015, Contrato No. PIF-017/2015, celebrado entre Comisión Federal de Electricidad y Proyecto CCC Empalme I, S.A.P.I. de C.V., celebrado el 15 de abril de 2015.
Convocatoria	Convocatoria para la Licitación Pública Internacional No. LO - O18TOQ054-T26-2014
Defecto	Cualquier hecho, condición o evento que afecte una Obra o parte de la misma, y que haga o pueda hacer que dicha Obra no sirva a su propósito o función, sea total o parcialmente (Cláusula 1.1 del Contrato).
Deficiencias Menores o “DG”	No existe una definición precisa en el Contrato; por tanto, en virtud de que los términos “deficiencia” y “defecto” son sinónimos se debe entender que son aquellos <i>defectos</i> (es decir “ <i>deficiencias</i> ”, como se les alude de manera redundante en el Contrato) en las Obras ejecutadas con respecto a la Central, que cuando no afectan negativamente la seguridad, confiabilidad y operación de la Central, no necesitan ser corregidas como condición para la emisión del Certificado de Aceptación Provisional correspondiente (Cláusulas 1.1 y 18.4 del Contrato).
Desperfecto	Evento que limita, total o parcialmente, la capacidad de generación, la eficiencia o la seguridad operativa de la Central, respecto de las Especificaciones del Contrato y el cual, si no es remediado, puede afectar la condición óptima de la Central (Cláusula 1.1 del Contrato).
DM-331	Deficiencia Menor identificada con ese número por CFE en el Anexo 9 del Acta de Aceptación Provisional, consistente en “ALTA VIBRACION en chumacera 2 de la TV, se tienen valores de vibración que superan los valores de alarmas en el incremento de velocidad (valores 250 micras), y en el decremento alcanza valores muy superiores al disparo (valores 400 micras), en velocidad alrededor de 1800 rpm”.
Documentos de la Licitación	Significa la Convocatoria y sus anexos, juntas de aclaraciones, adendas, Proposición, actas de apertura y Fallo (Cláusula 1.1 del Contrato).

Especificaciones del Contrato	Todas las Especificaciones, parámetros y requerimientos técnicos, de ingeniería, de construcción y de desempeño de las Obras, contenidas o referidas en el Contrato o en los Documentos de la Licitación, y en caso de discrepancia entre los estándares aplicables prevalecerá el estándar más alto (Cláusula 1.1 del Contrato).
Fecha de Aceptación Provisional	Fecha en la que Empalme haya logrado la Aceptación Provisional de la Central, es decir, el 26 de marzo de 2019 (Cláusulas 1.1 y 11.2 del Contrato).
Garantía de Cumplimiento	Obligación de Empalme de cumplir todas sus obligaciones derivadas del Contrato distintas a sus obligaciones establecidas en la Cláusula 20.2, garantizadas mediante la Carta de Crédito HSBC (Cláusula 11.1 a) del Contrato).
Garantía Operativa	Garantía de Empalme de que las Obras relacionadas con la Central, una vez lograda la Aceptación Provisional de la Central, cumplirán estrictamente con las Especificaciones del Contrato y estarán fabricadas y realizadas conforme a los Estándares de la Industria en forma técnicamente eficiente y completa, así como la continuidad de la operación de las Obras (Cláusula 20.1 del Contrato).
GBP o “£”	Significa libras esterlinas, moneda de curso legal en el Reino Unido.
Obras	Significa la Central, Materiales, sistemas y servicios de cualquier naturaleza a ser proporcionados o ejecutados por Empalme, que estén específicamente relacionados en el Contrato o se encuentren dentro de su alcance y se especifican en este sin limitación (Cláusula 1.1 del Contrato).
Período de Garantía	Período que comienza en la Fecha de Aceptación Provisional de la Central y termina en lo que ocurra primero: (i) el primer aniversario de la Fecha de Aceptación Provisional correspondiente a la Central; o (ii) la fecha determinada de conformidad con la Cláusula 20.4 del Contrato (Cláusulas 1.1 y 20.4 del Contrato).
Procedimiento de Gestión de RGs	Procedimiento de Gestión de Reclamos de Garantía para el Ciclo Combinado establecido de conformidad con la Cláusula 20.1 del Contrato que Empalme entregó a la CFE el 21 de febrero de 2019.

Quinto Convenio Modificatorio	Quinto Convenio Modificatorio al Contrato de Obra Pública Financiada a Precio Alzado Núm PIF-017/2015 de fecha 4 de marzo de 2019, <u>celebrado entre CFE y Empalme con el objeto de reconocer las afectaciones en tiempo que sufrió Empalme y lograr la Aceptación Provisional de la Central (Declaración 4 de CFE en dicho Convenio).</u>
Reclamos de Garantía o “RG”	Defectos que resultaren de las Obras, por vicios ocultos, y de cualquier otra responsabilidad en que hubiere incurrido Empalme, en los términos señalados en el Contrato y en el Código Civil Federal (Cláusula 20.1 del Contrato).
Reglas de la IBA	Significa Reglas de la International Bar Association sobre Práctica de Prueba en el Arbitraje Internacional, aprobadas el 17 de diciembre de 2020 por resolución del Consejo de dicha Institución.
“USD” o “dólares”	Significa dólares, moneda de curso legal en los Estados Unidos de América (Cláusula 1.1 del Contrato).
<u>Procedimiento</u> <u>(en orden cronológico)</u>	
Solicitud de Arbitraje	Solicitud de Arbitraje de Empalme, de fecha 18 de marzo de 2020.
Petición de Medidas de Emergencia	Petición de Medidas de Emergencia presentada por la Demandante ante la LCIA el 26 de marzo de 2020.
Ampliación de Petición	Ampliación de Medidas de Emergencia, de fecha 3 de abril de 2020.
Contestación a Petición de Medidas de Emergencia	Contestación a la Solicitud de Medidas de Emergencia y Ampliación, de fecha 6 de abril de 2020, presentada por la Demandada.
Procedimiento de Emergencia	Procedimiento iniciado por Empalme mediante Petición de Medidas de Emergencia de fecha 26 de marzo de 2020, formulada por Empalme, que concluyó mediante el Laudo del Árbitro de Emergencia que adelante se refiere.
Árbitro de Emergencia	Señor José Rosell, nombrado por la LCIA de conformidad con los artículos 5 y 9B del Reglamento el 2 de abril de 2020
Laudo del Árbitro de Emergencia	Laudo dictado por el Árbitro de Emergencia el 15 de abril de 2020, en el que este último, sujeto a que el Tribunal Arbitral

resolviese lo conducente una vez constituido, (i) ordenó a CFE abstenerse de realizar requerimientos de pago adicionales en relación con la Carta de Crédito HSBC, así como cualquier acto tendiente a su ejecución; y, (ii) suspendió el requerimiento de fecha 2 de abril de 2020, formulado por CFE a Empalme, pretendiendo que esta repusiese la Carta de Crédito HSBC por la cantidad de USD 13.627.892.00 dólares, correspondiente al monto por el cual CFE ejecutó dicha Carta de Crédito.

Contestación a Solicitud de Arbitraje

Contestación a la Solicitud de Arbitraje, presentada por CFE el 24 de abril de 2020.

Escrito de CFE Sobre Medidas Cautelares

Escrito presentado por CFE el 21 de septiembre de 2020 ante el Tribunal Arbitral en relación con las Medidas Cautelares dictadas mediante el Laudo del Árbitro de Emergencia, para efectos de que el Tribunal Arbitral resolviese lo conducente respecto de dichas medidas y respecto a una medida cautelar adicional solicitada por Empalme en su escrito.

Escrito de Empalme Sobre Medidas Cautelares

Escrito presentado por Empalme el 21 de septiembre de 2020 ante el Tribunal Arbitral en relación con las Medidas Cautelares dictadas mediante el Laudo del Árbitro de Emergencia, para efectos de que el Tribunal Arbitral resolviese lo conducente respecto de dichas medidas y respecto a una medida cautelar adicional solicitada por Empalme en su escrito.

Contestación de Empalme Sobre Medidas Cautelares

Memorial presentado por Empalme el 12 de octubre de 2020, para responder a los posicionamientos formulados por CFE en su Escrito sobre Medidas Cautelares.

Contestación de CFE Sobre Medidas Cautelares

Memorial presentado Empalme el 12 de octubre de 2020, para responder a los posicionamientos formulados por Empalme en su Escrito sobre Medidas Cautelares.

Memorial de Demanda

Memorial de Demanda presentado por Empalme el 11 de febrero de 2021, a las 0:06 A.M.

Dictamen GPS I

“Peritaje Experto sobre la Entrega y Liquidación del Proyecto de Ciclo Combinado para Generación de Energía Eléctrica 296 CC Empalme I”, de fecha 05 de febrero de 2021, rendido por Global Project Strategy Inc. (GPS), Anexo AP-001 del Memorial de Demanda.

Doosan Skoda	Doosan Škoda Power s.r.o, fabricante de la turbina de vapor, referida en Memorial de Demanda, Contestación a la Demanda y otras actuaciones.
Turbopartes	Turbopartes y Servicios Especializados S.A de C.V., contratada por CFE para realizar trabajos en taller y armado de la turbina de vapor, referida en Memorial de Demanda, Contestación a la Demanda y otras actuaciones.
Contestación a la Demanda	Escrito de Contestación de Demanda presentado por CFE el 23 de junio de 2021 para contestar el Memorial de Demanda de Empalme.
Dictamen Pericial Ing. Cámara Anzures	“Dictamen Pericial Proyecto Empalme I”, de fecha 21 de junio de 2021, rendido por el Ing. Lorenzo José Cámara Anzures, Anexo DP-001 de la Contestación a la Demanda.
Informe Maestra Fátima Salas	“Proyecto de Respuesta a los Reclamos de Garantía en Controversia” de fecha junio de 2021 (sic), emitido por M. en G.A. Fátima Karmina Salas Salmerón, perito de CFE, Anexo 109 de Dictamen Pericial Ing. Cámara Anzures (Anexo DP-001 de Contestación a la Demanda).
Memorial Pre-Audiencia Empalme	Memorial Adicional Pre-Audiencia presentado por Empalme el 29 de noviembre de 2021, en preparación de la Audiencia.
Dictamen GPS II	“Dictamen Pericial para el Memorial Adicional Pre-Audiencia de Empalme”, de fecha 25 de noviembre de 2021, rendido por GPS, Anexo AP-002 del Memorial Pre-Audiencia Empalme.
Apéndice No. 01	Análisis Técnico GPS DM (Deficiencias Menores), de fecha 25 de noviembre de 2021, parte integrante del Dictamen GPS II.
Informe CLUE o Informe Lapee	“Informe Pericial Técnico - Evaluación de las vibraciones, el desplazamiento axial y los trabajos de la turbina de vapor”, de fecha 29 de noviembre de 2021, emitido por CLUE Consultancy (Chris Lappee o Perito Chris Lappee, Christiaan Jacobus Maria Lappee), Anexo AP-003 del Memorial Pre-Audiencia Empalme.
Informe Pericial H2O	“Informe Pericial – Análisis de la Causa Raíz de Incrustación Biológica” de fecha 28 de noviembre de 2021, emitido por H2O Biofouling Solutions Iberia S.L., Anexo AP-004 del Memorial Pre-Audiencia Empalme.

Memorial Pre-Audiencia CFE	Memorial Adicional Pre-Audiencia presentado por CFE el 29 de noviembre de 2021, en preparación de la Audiencia.
Audiencia	Audiencia del arbitraje, celebrada de manera virtual mediante plataforma Zoom durante los días 14, 15, 16 y 17 de febrero de 2022, en la que las Partes presentaron su respectivo caso, sus peritos presentaron las consideraciones relativas a la opinión expresada en sus respectivos dictámenes, y los representantes de las Partes interrogaron discrecionalmente a los testigos y peritos de la Parte contraria.
Transcripción	Versiones estenográficas finales de cada uno de los días de Audiencia, entregadas el 17 de marzo de 2021 una vez revisadas y acordadas por las Partes.
Memorial de Cierre de Empalme	Memorial de Conclusiones y Declaración de Costos presentado por Empalme el 2 de mayo de 2021, con los argumentos y conclusiones finales en relación con su caso, así como la relación de los costos a que se refiere el Artículo 28 del Reglamento, incurridos por Empalme, y sus pretensiones al respecto.
Memorial de Cierre de CFE	Memorial de Conclusiones y Declaración de Costos presentado por CFE el 2 de mayo de 2021, con los argumentos y conclusiones finales en relación con su caso, así como la relación de los costos a que se refiere el Artículo 28 del Reglamento, incurridos por CFE, y sus pretensiones al respecto.

**LONDON COURT OF INTERNATIONAL ARBITRATION
(LCIA)**

Caso No. 204661

Proyecto CCC Empalme I, S.A.P.I. de C.V.
c/
Comisión Federal de Electricidad

De conformidad con el artículo 26 del Reglamento de Arbitraje de la LCIA vigente a partir del 01 de octubre de 2014 (“Reglamento”), aplicable al arbitraje arriba indicado, el Tribunal Arbitral dicta el siguiente:

LAUDO FINAL

I. PARTES Y SUS REPRESENTANTES

- A. PROYECTO CCC EMPALME I, S.A.P.I. DE C.V. (en lo sucesivo “Empalme” o “Demandante”).

La Demandante está representada por:

Eduardo Antonio Frías Valero	eduardo.frias@iepi.com.mx
Juan Vicente Ivorra García	juan.ivorra@sener.com.mx

Todas las notificaciones o comunicaciones a la Demandante deberán ser hechas a los siguientes representantes, cuyos datos de contacto son:

Rodrigo Zamora Etcharren	rzamora@galicia.com.mx
Santiago Oñate Yáñez	sonate@galicia.com.mx
Adriana Lozano Cázares	alozano@galicia.com.mx
Inés Wiechers P.	iwiechers@galicia.com.mx
Mariana Laguna G.	mlaguna@galicia.com.mx

Galicia Abogados, S.C.
Boulevard Manuel Ávila Camacho No. 24, Piso 7
Colonia Lomas de Chapultepec
Ciudad de México, 11000
Tel. 52.55.5540.9260

Carlos Maldonado Pérez	carlos.maldonado@sener.com.mx
Ramón Varela Aldazábal	ramon.varela@sener.com.mx

Elena Rivas Capelo

erivas@ohla-group.com

B. COMISIÓN FEDERAL DE ELECTRICIDAD (en lo sucesivo “CFE”, “Comisión” o “Demandada”).

Los representantes legales de la Demandada, así como sus respectivos datos y la dirección a la que deberá serles remitida toda la correspondencia en este arbitraje, son los siguientes:

Raúl Armando Jiménez Vázquez	raul.jimenez@cfe.mx
Georgina Velasco Zanella	georgina.velascoz@cfe.mx
Almudena Otero de la Vega	almudena.otero@cfe.mx
Ofelia López Melgar	ofelia.lopez@cfe.mx
Antonio Grayeb Cervantes	antonio.grayeb@cfe.mx
Atenas Sebastián Zepeda	atenas.sebastian@cfe.mx
Norma Mireles Frago	norma.mirelesf@cfe.mx
Martha Alicia Magdaleno Medina	martha.magdalen@cfe.mx
Carlos Alberto Bejarano Torres	carlos.bejarano@cfe.mx

Oficina del Abogado General
 Av. Paseo de la Reforma Número 164, Piso 11
 Colonia Juárez
 Alcaldía Cuauhtémoc
 Código Postal 06600
 Ciudad de México
 Teléfono +52 (55) 5229 4400, extensiones 82661, 82628, 82500 y 93670.

II. TRIBUNAL ARBITRAL

- Conforme al acuerdo de arbitraje que adelante se transcribe textualmente, contenido en la cláusula 30.3 del Contrato de Obra Pública a Precio Alzado de fecha 15 de abril de 2015, celebrado entre PROYECTO CCC EMPALME I, S.A.P.I. DE C.V. y COMISIÓN FEDERAL DE ELECTRICIDAD (“Contrato”), en la Solicitud de Arbitraje de fecha 18 de marzo de 2020 la Demandante designó como árbitro a un candidato; y la Demandada, a su vez, en su Contestación a la Solicitud de Arbitraje de fecha 24 de abril de 2020 designó como árbitro al Dr. Oscar Vásquez del Mercado Cordero. Posteriormente, mediante correo electrónico de 1 de junio de 2020 la LCIA informó a las partes que el árbitro designado por la Demandante había decidido declinar su aceptación a formar parte del Tribunal Arbitral; y consecuentemente, mediante correo electrónico de 12 de junio de 2020 la Demandante designó como árbitro al licenciado Eduardo Siqueiros Twomey.

2. Posteriormente, en un intercambio de correspondencia entre las partes y la LCIA, de 30 de junio de 2020, las partes acordaron un mecanismo de designación del presidente del Tribunal Arbitral, conforme al cual, mediante el sistema de veto y *rankeo* acordado en dicho mecanismo quedó designado el licenciado Fernando Estavillo Castro para actuar como árbitro presidente del Tribunal Arbitral y así lo comunicaron los co-árbitros a las Partes y a la LCIA mediante correo electrónico de 21 de julio de 2020.
3. En virtud de todo lo anterior, de acuerdo con el artículo 5 del Reglamento y de conformidad con la Cláusula 30.3 del Contrato la LCIA nombró como árbitros a¹:

Eduardo Siqueiros Twomey, Árbitro
ARB-INTER, S.C.
Paseo de los Tamarindos No. 50-PB
Bosques de las Lomas, Alcaldía Cuajimalpa
Ciudad de México, C.P. 05120
México

Oscar Vásquez del Mercado Cordero, Árbitro oscarvmc@gmail.com
Bosque de Yuriria 82
Fraccionamiento La Herradura, Segunda Sección
Huixquilucan, C.P. 52784,
México

Fernando Estavillo Castro, Presidente
Estavillo Arbitraje
Avenida Santa Fe 94, Torre A, Piso 8
Colonia Zedec Santa Fe
Alcaldía Álvaro Obregón
Ciudad de México, C.P. 01210
México.

4. La LCIA comunicó lo anterior a las Partes el 28 de julio de 2020² y, una vez que quedó integrado el Tribunal, las Partes no formularon objeción alguna sobre el nombramiento de los árbitros. Adicionalmente, en el capítulo II de la Orden Procesal No. 1 de fecha 31 de agosto de 2020, firmada por los representantes de las Partes y por los integrantes del Tribunal Arbitral, las Partes confirmaron expresamente la integración del Tribunal Arbitral y su jurisdicción para conocer y resolver sobre el caso, manifestando que no tienen objeción alguna sobre el nombramiento de los árbitros y su confirmación.

¹ Escrito del Vicepresidente de la LCIA de fecha 27 de julio de 2020.

² Comunicación de la LCIA de fecha 28 de julio de 2020.

III. ADMINISTRADOR DEL CASO

5. De conformidad con la Cláusula 30.3 del Contrato, el administrador del Caso es:

The London Court of International Arbitration (LCIA)
1 Paternoster Lane, London, EC4M 7BQ
+44 (0) 20 7936 6200

IV. ACUERDO DE ARBITRAJE

6. El Contrato celebrado entre CFE y Empalme contiene un acuerdo de arbitraje en su Cláusula 30.3, en los siguientes términos:

“30.3 Arbitraje. *Todas las desavenencias que surjan en relación con el presente Contrato, distintas a las controversias que de conformidad con la Cláusula 30.2, deban ser resueltas, serán decididas exclusivamente y definitivamente de conformidad con el Reglamento de Arbitraje de la Corte Internacional de Arbitraje de Londres (London Court of International Arbitration), por 3 (tres) árbitros; uno elegido por cada una de las Partes; el tercer árbitro será nombrado por las Partes o por los árbitros ya nombrados y a falta de acuerdo por la Corte Internacional de Arbitraje de Londres (London Court of International Arbitration, en adelante LCIA). Los árbitros preferentemente conocerán derecho mexicano. La sede del arbitraje será la ciudad de México, Distrito Federal, y se conducirá en idioma español. La Ley Aplicable al fondo del arbitraje y por supletoriedad al procedimiento en lo que fuere omiso el Reglamento de Arbitraje de la LCIA será la estipulada en la Cláusula 30.1. En cuanto al procedimiento, si el Reglamento de la Corte Internacional de Arbitraje de Londres es omiso, se aplicará las normas que las Partes o, en su defecto, el Tribunal Arbitral, determinen. El proceso arbitral será confidencial y cualquier Persona que participe en el mismo deberá guardar reserva. La confidencialidad anterior deberá mantenerse siempre y cuando una Autoridad competente no exija la publicidad conforme a la Ley Aplicable. Se entiende que el Tribunal Arbitral deberá aceptar como obligatorias las determinaciones -si las hubiere del Experto respecto de aspectos técnicos o administrativos dentro de los límites del mandato de dicho Experto.”*

V. DERECHO APLICABLE

7. Por disposición de la Cláusula 30.1 del Contrato (Ley Aplicable), el Contrato se registrará e interpretará de conformidad con la Ley de Obras Públicas y Servicios Relacionados con las Mismas (LOPSRM) y las demás Leyes Federales de México.

VI. IDIOMA DEL ARBITRAJE

8. De conformidad con la Cláusula 30.3 del Contrato, el arbitraje se conducirá en idioma español.

VII. SEDE DEL ARBITRAJE

9. Conforme a la Cláusula 30.3 del Contrato, “... *La sede del arbitraje será la ciudad de México, Distrito Federal...*”, actualmente denominada Ciudad de México.

VIII. ANTECEDENTES

Solicitud de Arbitraje

10. Empalme inició el procedimiento mediante Solicitud de Arbitraje (“Solicitud de Arbitraje”) de fecha 18 de marzo de 2020, en la que formuló las siguientes pretensiones³:

- “A. *Condene a CFE al pago de toda cantidad y concepto que sea objeto de reclamo por EMPALME en el presente procedimiento arbitral, incluyendo las cantidades retenidas por CFE, así como los intereses y demás accesorios que correspondan.*
- B. *Emita las declaraciones que correspondan a fin de confirmar la improcedencia y falta de fundamento de todo reclamo formulado por CFE en contra de EMPALME.*
- C. *Emita las declaraciones que correspondan a fin de confirmar la inexistencia de cualquier incumplimiento de EMPALME.*
- D. *Emita las declaraciones que correspondan a fin de obligar a CFE a abstenerse de ejercer derecho contractual alguno tendiente al pago de cualquier monto reclamado por CFE a EMPALME por cualquier incumplimiento alegado.*
- E. *Emita las declaraciones y condenas que EMPALME solicita en este escrito, así como aquéllas que con posterioridad solicite en forma específica, todas encaminadas a resolver el fondo de las disputas materia de este arbitraje en sentido favorable a EMPALME.*
- F. *Condene a CFE a indemnizar a EMPALME por todo otro concepto adicional declarativo o de condena, incumplimiento, daño, perjuicio, intereses, etc. que derive de los hechos y reclamaciones materia de esta Solicitud de Arbitraje o de aquellos que EMPALME pueda añadir posteriormente.”*

Procedimiento de Emergencia

11. El 26 de marzo de 2020, Empalme formuló Petición de Medidas de Emergencia (“Petición de Medidas de Emergencia”) ante la LCIA de conformidad con el artículo 9B del Reglamento⁴.

³ Solicitud de Arbitraje, páginas 8 y 9.

⁴ Escrito de Empalme de fecha 26 de marzo de 2020.

12. La LCIA nombró como Árbitro de Emergencia al señor José Rosell (“Árbitro de Emergencia”) de conformidad con los artículos 5 y 9B del Reglamento y lo notificó a las Partes el 2 de abril de 2020⁵.
13. El Árbitro de Emergencia invitó a las Partes el 3 de abril de 2020, a informarle la fecha en que cada una de ellas sugiriera presentar su respectivo Memorial⁶.
14. La Demandante formuló su propuesta el mismo día y anunció la presentación de una Ampliación a la Petición⁷. Más tarde, la Demandante presentó el escrito denominado Ampliación de Petición de Medidas de Emergencia (“Ampliación de Petición”), de fecha 3 de abril de 2020⁸.
15. Previo intercambio de comunicaciones entre las Partes y el Árbitro de Emergencia, este último procedió al desahogo del procedimiento de emergencia (“Procedimiento de Emergencia”) y dictó laudo (“Laudo del Árbitro de Emergencia”) el 15 de abril de 2020.
16. En el Laudo del Árbitro de Emergencia, este último decidió lo siguiente por las razones ahí expresadas¹⁰:

- “(i) *que la Demandante cumplió con las disposiciones del Artículo 9.5 del Reglamento LCIA en el momento de presentar su Petición de Medidas de Emergencia;*
- “(ii) *que la Demandada se abstendrá de realizar requerimientos de pago adicionales en virtud de la Carta de Crédito HSBC, así como cualquier acto tendiente a su ejecución, hasta el momento en que el tribunal arbitral, que será constituido en este arbitraje, decida confirmar o modificar esta decisión;*
- “(iii) *que el requerimiento hecho por la Demandada a la Demandante, mediante le (sic) oficio número 7B/2020/RJMN del 2 de abril de 2020, de reponer la Carta de Crédito HSBC al monto vigente en el momento anterior al cobro de la cantidad de USD 13.627.892,00 por parte de la Demandada, queda suspendido hasta que el tribunal arbitral, una vez constituido en este arbitraje, ordenen (sic) lo contrario;*
- “(iv) *denegar la medida de emergencia tendiente a ordenar que la Demandada se abstenga de realizar requerimientos de pago adicionales en relación con la Carta de Crédito Banorte;*

⁵ Correo electrónico de la LCIA de fecha 2 de abril de 2020.

⁶ Correo electrónico del Árbitro de Emergencia de fecha 3 de abril de 2020.

⁷ Correo electrónico del Árbitro de Emergencia de fecha 3 de abril de 2020 y Laudo del Árbitro de Emergencia, ¶ 20.

⁸ Ampliación de Petición de fecha 3 de abril de 2020 y Laudo del Árbitro de Emergencia, ¶ 21.

⁹ Laudo del Árbitro de Emergencia, ¶¶ 20 a 39.

¹⁰ Laudo del Árbitro de Emergencia de fecha 15 de abril de 2020, ¶¶ 135 y 136 (i) a (vi).

- (v) *denegar las medidas de emergencia mencionadas en los sub-párrafos 61(i) y 61(iv), supra.*¹¹
- (vi) *desestimar todas las demás peticiones de las Partes.”*

Contestación a Solicitud de Arbitraje

17. El 24 de abril de 2020, es decir con posterioridad a la emisión del Laudo del Árbitro de Emergencia, CFE presentó su Contestación a la Solicitud de Arbitraje (“Contestación a la Solicitud de Arbitraje”), en la que formuló las siguientes peticiones¹²:

- “a) *Revocar y dejar sin efecto las medidas cautelares otorgadas a favor de la Demandante indicadas en los resolutivos b) y c) del Laudo dictado en el Procedimiento de Emergencia.*
- b) *Confirmar las determinaciones señaladas en los resolutivos d), e) y f) del Laudo dictado en el Procedimiento de Emergencia.*
- c) *Desechar las pretensiones de la Demandante y en el momento procesal oportuno, dictar el Laudo correspondiente, confirmando que la Demandante incumplió con sus obligaciones conforme al Contrato de Obra Pública Financiada a Precio Alzado No. PIF-017/2015.*
- d) *En caso que el Tribunal Arbitral reserve su decisión sobre las Medidas Cautelares de Emergencia hasta el dictado del Laudo Final, proceda en términos de lo manifestado en los petitorios) y b).*
- e) *En consecuencia de todo lo anterior, se condene a la Demandante al pago de daños y perjuicios calculados desde la fecha de incumplimiento hasta en la que el Laudo final.*
- f) *Se condene a la Demandante al pago de todos los gastos y costas que se deriven del presente arbitraje.”*

IX. DESARROLLO DEL PROCEDIMIENTO

18. Las referencias que aparecen a continuación en relación con los documentos o comunicaciones objeto de las mismas, se indican en cursiva cuando tienen el propósito de parafrasear de manera abreviada o no necesariamente textual alguna manifestación, sin alterar la esencia de

¹¹ Los subpárrafos a que se refiere el Árbitro de Emergencia en el Laudo del Árbitro de Emergencia, dicen: “(i) Emita orden dirigida a la Demandada mediante la cual se le requiera restituir a HSBC México la cantidad obtenida por la Demandada mediante la ilegal ejecución de la Carta de Crédito HSBC o para que, en su defecto, esa cantidad sea depositada en un fondo o cuenta bajo la custodia de un tercero (un fideicomiso o un *escrow*)” y “(d) Emita orden mediante la cual se autorice la Demandante proceder a la cancelación de la Carta de Crédito HSBC.”

¹² Correo electrónico y carta de fecha 24 de abril de 2020 y Contestación a la Solicitud, páginas 13 y 14.

la misma; y se transcriben entrecomilladas, cuando constituyen una cita textual de alguna manifestación o documento.

Inicio del procedimiento

19. El 28 de julio de 2020, fecha en que le fue comunicado el nombramiento de los tres integrantes del Tribunal Arbitral, la Demandante informó a la LCIA y al Tribunal Arbitral¹³ que las Partes convinieron en no sujetarse a los plazos establecidos en el artículo 15 del Reglamento y, con fundamento en el artículo 15.1 del mismo, acordaron que determinarían el Calendario Procesal a seguir, de manera conjunta con el Tribunal Arbitral.
20. En la comunicación antes citada, la Demandante solicitó que se dejase sin efectos el requerimiento a las Partes formulado en la comunicación de la Secretaría de la misma fecha, para que, en un plazo de 28 días, Empalme enviase al Tribunal Arbitral y a las Partes, con copia a la Secretaría de la LCIA: (a) indicación escrita de que su solicitud de arbitraje fuese considerada como su escrito de demanda; o (b) su Escrito de Demanda. Esta comunicación de la Demandante fue confirmada por CFE mediante correo electrónico de fecha 29 de julio de 2020.
21. En virtud de lo anterior, el 6 de agosto de 2020 el Tribunal Arbitral invitó a las Partes a presentarle a más tardar el 18 de agosto de 2020 una propuesta conjunta de Calendario Procesal, sin perjuicio de presentar propuestas individuales respecto de aquellas cuestiones sobre las que no hubieren llegado a un acuerdo. En esa misma comunicación, el Tribunal Arbitral indicó a la Demandante que, a más tardar el 25 de agosto de 2020, debía presentar (a) una indicación escrita de que su Solicitud de Arbitraje fuese considerada como su escrito de demanda; o (b) su Escrito de Demanda, salvo que en este segundo supuesto las Partes hubieren acordado un plazo distinto¹⁴.
22. El 7 de agosto de 2020, la Demandante confirmó lo previamente manifestado en la comunicación de fecha 28 de julio de 2020 arriba citada y manifestó que su Solicitud de Arbitraje no debería ser considerada como su Memorial de Demanda, que sería presentado en los plazos que se estableciesen en el Calendario Procesal¹⁵.
23. En la misma comunicación del 7 de agosto de 2020 citada en el párrafo anterior, la Demandante planteó la posibilidad de que las Partes y el Tribunal Arbitral elaborasen de manera conjunta un documento con las directrices básicas a observar en el procedimiento. El Tribunal Arbitral, por su parte, invitó a la Demandada a formular comentarios sobre el

¹³ Correo electrónico de la Demandante de fecha 28 de julio de 2020, dirigido a la Secretaría de la LCIA y a los miembros del Tribunal Arbitral.

¹⁴ Correo electrónico del Tribunal Arbitral a las Partes, de fecha 6 de agosto de 2020.

¹⁵ Correo electrónico de la Demandante de fecha 7 de agosto de 2020.

planteamiento de la Demandante y, en aras de agilizar la puesta en marcha del arbitraje, solicitó a las Partes que, en caso de que la Demandada coincidiese con el punto de vista de la Demandante, dentro del plazo fijado por el Tribunal Arbitral en su comunicación de fecha 6 de agosto de 2020, además de lo solicitado en la misma presentasen una propuesta conjunta sobre las directrices que, a su juicio, deberían observarse en el procedimiento.

24. El 18 de agosto de 2020, la Demandante informó que las Partes seguían trabajando en la configuración y definición del Calendario Procesal, solicitando que el Tribunal Arbitral otorgase una prórroga de 7 días para presentar la propuesta respectiva. Además de lo anterior, la Demandante expuso algunas de las directrices que, a su juicio, debería contener la Orden Procesal No. 1 en relación con el procedimiento¹⁶. La Demandada manifestó en la misma fecha no tener comentarios sobre la solicitud de prórroga de la Demandante y confirmó que las Partes estaban trabajando para definir el Calendario Procesal¹⁷.
25. El Tribunal concedió la prórroga solicitada el 19 de agosto de 2020, fijando como plazo el 25 de agosto de 2020 para la presentación de la propuesta conjunta de Calendario Procesal, así como para la presentación de propuestas individuales en relación con las cuestiones sobre las que existiere discrepancia¹⁸.
26. La Demandante presentó el 25 de agosto de 2020 las bases del calendario procesal convenidas por las Partes, manifestando su entendimiento de que las mismas serían incorporadas en un calendario procesal redactado por el Tribunal Arbitral, sujeto a comentarios finales de las Partes¹⁹. La Demandada confirmó el mismo día el contenido del mensaje de la misma fecha enviado por la Demandante, relativo a las bases para el Calendario Procesal²⁰.
27. El Tribunal Arbitral deliberó sobre las manifestaciones previas de las Partes y elaboró un primer borrador de Orden Procesal No. 1, con el Calendario Procesal y disposiciones relativas al procedimiento, que sometió a la consideración de las Partes mediante correo electrónico de fecha 31 de agosto de 2020, fijándoles como plazo para hacer sus comentarios al respecto el 7 de septiembre de 2020. En el mismo correo, el Tribunal Arbitral solicitó a las Partes le informasen si había sido considerada una posible reconvencción y, en su caso, sus implicaciones en relación con el Calendario Procesal acordado; y, asimismo, le informasen en la medida de lo posible una fecha estimada para la celebración de la Audiencia y la duración estimada de la misma²¹.

¹⁶ Mediante correo electrónico y escrito de la Demandante, de fecha 18 de agosto de 2020.

¹⁷ Correo electrónico de la Demandada de fecha 18 de agosto de 2020.

¹⁸ Correo electrónico del Tribunal Arbitral de fecha 19 de agosto de 2020.

¹⁹ Correo electrónico de la Demandante, de fecha 25 de agosto de 2020.

²⁰ Correo electrónico de la Demandada, de fecha 25 de agosto de 2020.

²¹ Correo electrónico del Tribunal Arbitral de fecha 31 de agosto de 2020 y borrador de Orden Procesal No. 1 adjunto al mismo.

28. La Demandante presentó el 7 de septiembre de 2020 el borrador de Orden Procesal No. 1 antes citado, con la propuesta conjunta de las Partes mediante la función de *control de cambios* en relación con dicho documento, manifestando que las Partes seguían en pláticas respecto de la estimación de fecha y duración de la Audiencia²². La Demandada confirmó el 7 de septiembre de 2020 lo manifestado por la Demandante en relación con el borrador de Orden Procesal No. 1, y confirmó que CFE no tenía intenciones de presentar una reconvencción, por lo que se sujetaría a los plazos acordados e incluidos en la propuesta conjunta de Calendario Procesal²³.
29. El Tribunal Arbitral remitió a las Partes el 9 de septiembre de 2020 el texto final de la Orden Procesal No. 1, en el que se recogieron las modificaciones acordadas conjuntamente por las Partes, incluyendo la fecha en que surtiría efectos dicha Orden y el Calendario Procesal, así como las fechas acordadas por las Partes. En el mismo correo, el Tribunal Arbitral incluyó diversas indicaciones respecto a la logística a seguir en relación con la firma de dicho documento, para su ulterior envío a las Partes y a la LCIA²⁴.

Orden Procesal No. 1

30. La Orden Procesal No. 1 fue firmada por los representantes de cada una de las Partes y por cada uno de los tres integrantes del Tribunal Arbitral en las fechas que se indican en la misma, para surtir efectos a partir del 31 de agosto de 2020. El Tribunal Arbitral envió dicha Orden a las Partes y a la LCIA el 10 de septiembre de 2020²⁵. Las actuaciones que a continuación se refieren, derivan del Calendario Procesal establecido en la Orden Procesal No. 1.

Escritos simultáneos de las Partes en relación con las Medidas Cautelares

Demandante

31. Conforme a lo establecido en el Calendario Procesal, la Demandante presentó el 21 de septiembre de 2020 su Memorial sobre Medidas Cautelares (“Escrito de Empalme sobre Medidas Cautelares”), en el que discutió extensamente el Laudo del Árbitro de Emergencia con la pretensión de que “en la especie se confirmen y concedan, respectivamente, ciertas Medidas Cautelares con el objeto de proteger su esfera jurídica y garantizar la eficacia de un eventual laudo a su favor”. En el mismo escrito, Empalme solicita una medida cautelar adicional consistente en que el Tribunal Arbitral “ordene a CFE el pago de la cantidad de USD \$6,950,822.24 derivada del Acuerdo del 7 de Julio de 2020, más los intereses devengados

²² Correo electrónico de la Demandante de fecha 7 de septiembre de 2020 y borrador de Orden Procesal No. 1 adjunto al mismo.

²³ Correo electrónico de la Demandada de fecha 7 de septiembre de 2020.

²⁴ Correo electrónico del Tribunal Arbitral de fecha 9 de septiembre de 2020 y versión final de la Orden Procesal No. 1 adjunta al mismo.

²⁵ Correo electrónico del Tribunal Arbitral de fecha 10 de septiembre de 2020 y Orden Procesal No. 1 adjunta al mismo, firmada por los representantes de las Partes y por los integrantes del Tribunal Arbitral.

conforme al Contrato o para que, de manera subsidiaria, ordene a CFE la emisión de una garantía por el monto objeto de dicho acuerdo.”²⁶

32. En el Escrito arriba citado, Empalme formuló las siguientes peticiones:

“A. *Confirme las Medidas Cautelares concedidas a EMPALME en el Laudo de Emergencia consistentes en:*

(i) *La emisión de orden por medio de la cual se establezca que EMPALME no debe reponer la Carta de Crédito de HSBC al monto vigente en el momento anterior al ilegal cobro efectuado por CFE; y*

(ii) *La emisión de orden dirigida a CFE a fin de que se abstenga de realizar requerimientos de pago adicionales en relación con la Carta de Crédito HSBC, así como cualquier acto tendiente a su ejecución.*

B. *Se concedan a EMPALME las Medidas Cautelares señaladas en este ocurso, consistentes en:*

(iii) *La emisión de orden dirigida a CFE mediante la cual se le requiera restituir a HSBC México la cantidad obtenida por CFE mediante la ilegal ejecución de la Carta de Crédito HSBC o para que, en su defecto, esa cantidad sea depositada en un fondo o cuenta bajo la custodia de un tercero;*

(iv) *La emisión de orden mediante la cual se ordene la cancelación la cancelación de la Carta de Crédito HSBC; y,*

(v) *La emisión de orden dirigida a CFE mediante la cual se ordene el pago del monto objeto del Acuerdo del 7 de Julio de 2020 o, en su defecto, se constituya garantía del mismo.”*

Demandada

33. La Demandada presentó el 21 de septiembre de 2020 su Escrito en relación con las Medidas Cautelares (“Escrito de CFE sobre Medidas Cautelares”), “cuyo objeto es el debate de la permanencia, revocación o modificación de las Medidas Cautelares emitidas por el Árbitro de Emergencia”²⁷.

²⁶ Escrito de Empalme sobre Medidas Cautelares de fecha 21 de septiembre de 2020, y ¶¶ 3 y 202 a 220 del mismo.

²⁷ Escrito de CFE sobre Medidas Cautelares de fecha 21 de septiembre de 2020, y ¶ 38 del mismo.

34. En el Escrito arriba citado, CFE formuló las siguientes peticiones:

- “a) Dejar sin efectos las Medidas Cautelares dictadas en el Laudo arbitral del procedimiento de emergencia de fecha 15 de abril de 2020 en relación con la presente controversia.*
- b) En caso de confirmarse la vigencia de las medidas cautelares señaladas, se proceda a ordenarse a la Demandante la constitución de una garantía de conformidad con el artículo 25.1 del Reglamento LCIA, hasta en tanto se resuelva el Juicio en lo principal por un monto que incluya incluso daños que se pudieran ocasionar a la CFE por obstaculizar el cobro de la Carta de Crédito HSBC.”*

Contestación simultánea a los Escritos de las Partes en relación con las Medidas Cautelares

Demandante

35. De conformidad con lo establecido en el Calendario Procesal, la Demandante presentó el 12 de octubre de 2020 el Memorial de Contestación de Empalme al Escrito de CFE sobre Medidas Cautelares (“Contestación de Empalme sobre Medidas Cautelares”), mediante el cual controvertió las aseveraciones de la Demandada contenidas en el Escrito de CFE sobre Medidas Cautelares, y formuló las mismas peticiones expuestas en el Escrito de Empalme sobre Medidas Cautelares²⁸.

Demandada

36. La Demandada presentó el 12 de octubre de 2020 su Contestación a Memorial sobre Medidas Cautelares en relación con las Medidas Cautelares (“Contestación de CFE sobre Medidas Cautelares”), mediante el cual controvertió extensamente las aseveraciones de la Demandante contenidas en el Escrito de Empalme sobre Medidas Cautelares y formuló las siguientes peticiones²⁹:

- “a) Dejar sin efectos las Medidas Cautelares dictadas en el laudo arbitral del procedimiento de emergencia de fecha 15 de abril de 2020 en relación con la presente controversia.*
- b) Permitir la reposición de la Carta de Crédito HSBC.*
- c) Permitir requerimientos adicionales en caso de incumplimiento*

²⁸ Contestación de Empalme sobre Medidas Cautelares de fecha 12 de octubre de 2020 y ¶ 29 del mismo.

²⁹ Contestación de CFE sobre Medidas Cautelares de fecha 12 de octubre de 2020 y ¶ 211 del mismo.

d) *En caso de confirmarse la vigencia de las medidas cautelares señaladas, se proceda a ordenarse a la Demandante la constitución de una garantía de conformidad con el artículo 25.1 del Reglamento LCIA.*

e) *Desechar las peticiones de Medidas Cautelares adicionales.”*

Decisión del Tribunal Arbitral sobre Medidas Cautelares

37. El Tribunal Arbitral analizó detalladamente tanto el Laudo del Árbitro de Emergencia como los escritos y documentos que este último analizó para emitir dicho laudo. Asimismo, el Tribunal Arbitral analizó las manifestaciones de las Partes contenidas en sus respectivos escritos, que se citan en los párrafos 27 a 32 anteriores, así como los anexos aportados por las Partes en apoyo de sus planteamientos, sobre los cuales deliberó el Tribunal a fin de estar en posibilidad de resolver lo conducente de conformidad con el párrafo 9.11 del Artículo 9B del Reglamento.

Orden Procesal No. 2

38. En aras de mantener el *statu quo* existente en virtud de lo resuelto por el Árbitro de Emergencia y a fin de que no se agravase la controversia existente entre las Partes; y principalmente teniendo en cuenta que las cuestiones planteadas por las Partes en relación con las Medidas Cautelares corresponden esencialmente al fondo del caso y forman parte de la disputa planteada por las Partes en la Solicitud de Arbitraje y en la Contestación a la Solicitud, el Tribunal Arbitral llevó a cabo las deliberaciones que consideró necesarias y emitió la Orden Procesal No. 2 de fecha 26 de octubre de 2020³⁰ –dentro del plazo fijado para tal efecto en el Calendario Procesal– que transmitió a las Partes mediante correo electrónico en la misma fecha y mediante la cual resolvió las cuestiones planteadas en los términos que se transcriben textualmente a continuación, por su relevancia para efectos de la litis.

“1. *El Tribunal Arbitral confirma la decisión del Árbitro de Emergencia a que se refiere el inciso (i) del párrafo 136 del Laudo del Árbitro de Emergencia, por las razones expresadas por este último y, por tanto, confirma que la Demandante cumplió con las disposiciones del Artículo 9.5 del Reglamento LCIA en el momento de presentar su Petición de Medidas de Emergencia.*

2. *En virtud de que ha sido presentada la Solicitud de Arbitraje y conforme a lo acordado por las Partes se trata de una cuestión relativa al fondo del caso y forma parte de la litis del presente arbitraje, el Tribunal Arbitral confirma la decisión del Árbitro de Emergencia a que se refiere el inciso (ii) del párrafo 136 del Laudo del Árbitro de Emergencia y, por tanto, la Demandada se abstendrá de realizar requerimientos de pago adicionales en virtud de la Carta de Crédito HSBC, así*

³⁰ Orden Procesal No. 2 de fecha 26 de octubre de 2020 y capítulo de Resoluciones de la misma.

como cualquier acto tendente a su ejecución, mientras esté en trámite el presente procedimiento arbitral y el Tribunal dicte laudo final.

3. *Por ser una cuestión relativa al fondo del caso y formar parte de la litis del presente arbitraje, el Tribunal Arbitral confirma la decisión del Árbitro de Emergencia a que se refiere el inciso (iii) del párrafo 136 del Laudo del Árbitro de Emergencia y, por tanto, mientras esté en trámite el presente procedimiento arbitral, el requerimiento hecho por la Demandada a la Demandante, mediante el oficio número 7B/2020/RJMN de 2 de abril de 2020, de reponer la Carta de Crédito HSBC al monto vigente en el momento anterior al cobro de la cantidad de USD 13.627.892,00 por parte de la Demandada, queda suspendido hasta en tanto el Tribunal Arbitral resuelva sobre la procedencia de dicho requerimiento.*
4. *Por ser una cuestión relativa al fondo del caso y formar parte de la litis del presente arbitraje, el Tribunal Arbitral deja sin efecto la decisión del Árbitro de Emergencia a que se refiere el inciso (iv) del párrafo 136 del Laudo del Árbitro de Emergencia y, por tanto, la Demandada, se abstendrá de realizar cualquier requerimiento de pago en virtud de la Carta de Crédito Banorte, así como cualquier acto tendente a su ejecución, mientras esté en trámite el presente procedimiento arbitral y el Tribunal dicte laudo final.*
5. *Por ser una cuestión relativa al fondo del caso y formar parte de la litis del presente arbitraje, el Tribunal Arbitral confirma en lo conducente la decisión del Árbitro de Emergencia a que se refiere el inciso (v) del párrafo 136 del Laudo del Árbitro de Emergencia y, por tanto, se niega la Petición de la Demandante en el sentido de que se emita orden dirigida a la Demandada mediante la cual se le requiera restituir a HSBC México la cantidad obtenida por la Demandada mediante la ejecución de la Carta de Crédito HSBC o para que, en su defecto, esa cantidad sea depositada en un fondo o cuenta bajo la custodia de un tercero (un fideicomiso o un escrow).*
6. *Por ser una cuestión relativa al fondo del caso y formar parte de la litis del presente arbitraje, el Tribunal Arbitral confirma en lo conducente la decisión del Árbitro de Emergencia a que se refiere el inciso (v) del párrafo 136 del Laudo del Árbitro de Emergencia y, por tanto, se niega la Petición de la Demandante en el sentido de que se emita orden mediante la cual se autorice a la Demandante a proceder a la cancelación de la Carta de Crédito HSBC.*
7. *Asimismo, por constituir la pretensión de pago o depósito a que se refiere la Demandante una cuestión relativa al fondo del caso, que por tanto debe formar parte de la litis del presente arbitraje, el Tribunal Arbitral niega el otorgamiento de la Medida Cautelar Adicional solicitada por la Demandante en los párrafos 202 a 220 del Memorial de Empalme sobre Medidas Cautelares; y por lo que hace al depósito pretendido alternativamente por la Demandante, tampoco reúne los requisitos de necesidad, urgencia, irreparabilidad ni proporcionalidad.*
8. *Se desestiman todas las demás peticiones formuladas por las Partes en sus respectivos Memoriales y Escritos presentados ante el Tribunal Arbitral en esta etapa del procedimiento.”*

39. Las resoluciones del Tribunal Arbitral en los términos de la Orden Procesal No. 2 no fueron objetadas en forma alguna por cualquiera de las Partes.

Memorial de Demanda

40. El contenido y términos del Memorial de Demanda se comentan más adelante al realizar el análisis del fondo del caso. Las circunstancias que existieron en relación con esta actuación procesal dieron lugar a numerosos incidentes, que a continuación se reseñan por su importancia
41. De conformidad con el Calendario Procesal³¹, la Demandante debía presentar su Memorial de Demanda dentro de los 100 días siguientes a la Decisión del Tribunal Arbitral sobre Medidas Cautelares³²; lo cual, implica que el plazo respectivo vencería el 10 de febrero de 2021.
42. La Demandante presentó su Memorial de Demanda en formato electrónico mediante correo electrónico de fecha 11 de febrero de 2021, a las 0:06 A.M., manifestando en su correo que *los anexos a dicho Memorial estaban siendo subidos a la liga que ahí proporcionó, que continuaba actualizándose*. En el mismo correo, La Demandante manifestó que estaba preparando una lista detallada de dichos los anexos, que compartiría posteriormente.
43. A continuación, mediante correo electrónico de fecha 11 de febrero de 2021, transmitido a las 6:57 A.M., la Demandante informó que aún estaba en espera de que concluyese la importación de los anexos del Memorial de Demanda al Dropbox que había preparado; lo cual, de acuerdo al sistema, *no debería demorar más de un par de horas*.
44. Posteriormente, mediante correo electrónico de la misma fecha, transmitido a las 13:32 horas, Empalme informó que ya podía ser consultada la totalidad de los documentos de la carpeta de Anexos del Memorial de Demanda. Así mismo, la Demandante expresó en dicha comunicación que *desde ese momento manifestaba su conformidad para que, en caso de considerarse necesario, se adicionase un día al término para que CFE produjera su Contestación a la Demanda*, con motivo de las circunstancias antes referidas. En la misma comunicación, la Demandante comentó además que en breve se estaría recibiendo su Memorial de Demanda *con la lista de anexos actualizada, sin que se viera modificada ninguna otra cuestión sustancial de dicho memorial*.
45. Mediante comunicación del mismo 11 de febrero de 2021, transmitida a las 14:15 horas, el Tribunal Arbitral preguntó a la Demandante si existían archivos adicionales que debiera

³¹ Orden Procesal No. 1 de fecha 31 de agosto de 2020, página 5.

³² Dictada el 26 de octubre de 2020, mediante la citada Orden Procesal No. 2.

descargar, posteriores a la comunicación enviada por el Tribunal a las 13:24 horas a Empalme para acusar recibo, en Dropbox, de Anexos al Memorial de Demanda; además, solicitó a la Demandante que precisase la hora en que concluyó el envío de la totalidad de los documentos de la carpeta de Anexos del Memorial de Demanda a la plataforma de Dropbox de Empalme, pidiéndole abstenerse de modificar el texto de dicho memorial, con excepción de la lista de los anexos al mismo. Mediante la misma comunicación, el Tribunal Arbitral invitó a la Demandada a manifestar lo que conviniese a sus intereses a más tardar el 12 de febrero de 2021.

46. La Demandante, en respuesta a lo solicitado por el Tribunal Arbitral, le informó mediante correo electrónico de 11 de febrero de 2021, transmitido a las 14:30 horas, que la importación de los archivos de su carpeta electrónica había terminado alrededor de las 13:30 horas, pidiéndole descargarlos de nuevo en caso de haberlo hecho con anterioridad. Finalmente, la Demandante envió el mismo día, a las 19:44 horas, comunicación de correo electrónico a la que adjuntó el Memorial de Demanda, manifestando que *ya reflejaba los anexos actualizados*; y a las 19:53 horas, envió el Memorial de Demanda en versión Word, señalando que *en los próximos días haría llegar un ejemplar de dicho memorial y el reporte pericial que lo acompaña*.
47. En virtud de los acontecimientos mencionados en los párrafos precedentes y teniendo en consideración que las comunicaciones recibidas de las Partes a lo largo del 11 de febrero de 2021 implicaban una breve demora de minutos en el envío del Memorial de Demanda y de unas horas para los voluminosos Anexos, sin que la Demandada hubiese formulado objeción alguna dentro del plazo fijado para tal efecto, ni después, mediante comunicación de correo electrónico de fecha 17 de febrero de 2021 el Tribunal Arbitral declaró presentado oportunamente el Memorial de Demanda y adicionó un día al término para que la Demandada produjese su Contestación a la Demanda, pactado originalmente para expirar el 21 de mayo de 2021, y así reflejado en la Orden Procesal No. 1. Respecto a lo anterior, el Tribunal Arbitral hizo notar a las Partes que, para determinar la nueva fecha de expiración de dicho plazo, se debería de tener en cuenta lo dispuesto por el artículo 4.6 del Reglamento.
48. Mediante correo electrónico de fecha 18 de febrero de 2021 y escrito de la misma fecha adjunto al mismo, la Demandada manifestó la necesidad de “emitir su posicionamiento respecto de las determinaciones adoptadas por el Tribunal Arbitral mediante comunicación del día 17 de febrero de 2021 a las 8:38 p.m.”. En dicho escrito, la Demandada analiza de manera pormenorizada los hechos acaecidos durante el 11 de febrero de 2021 en relación con la presentación del Memorial de Demanda y de los documentos que constituyen Anexos al mismo³³, que son los referidos por el Tribunal Arbitral en los párrafos que anteceden.

³³ Escrito de CFE de fecha 18 de febrero de 2021, capítulo de Hechos, páginas 1 a 3.

49. En el escrito antes citado, la Demandada controvierte extensamente las determinaciones adoptadas por el Tribunal Arbitral en su comunicación de fecha 17 de febrero de 2017, argumentando el incumplimiento al Calendario Procesal por parte de Empalme en virtud de la presentación extemporánea del Memorial de Demanda y Anexos citados; la brevedad del plazo otorgado a CFE para comparar la primera y segunda versiones del Memorial de Demanda, para determinar si la segunda contiene modificaciones sustantivas respecto de la primera; la imposibilidad de acceder a los Anexos del Memorial de Demanda contenidos en la plataforma Dropbox de Empalme; la omisión de copiar a algunos de los representantes de CFE, en los diversos correos electrónicos; y, la pretendida aplicabilidad obligatoria del Código de Comercio al procedimiento arbitral³⁴.
50. Como secuela de todo lo anterior, la Demandada solicitó al Tribunal lo siguiente³⁵:

“Como peticiones principales:

- I. *Se reconsidere y se tenga por no presentado oportunamente el Memorial de Demanda y, en términos de la lex arbitri, se tengan por terminadas las actuaciones de este procedimiento.*
- II. *Declarar como no admitidas las pruebas documentales, testimoniales y periciales presentadas extemporáneamente y sin causa justificada por la Demandante, sobre las cuales, a la fecha, CFE tampoco tiene acceso.*

Alternativamente, en caso de que el Tribunal Arbitral confirme su decisión de aceptar la presentación extemporánea del Memorial de Demanda:

- III. *Que sea exclusivamente respecto del denominado “MEMORIAL 1”³⁶ dado el alcance de la decisión del Tribunal Arbitral de 17 de febrero de 2021, y solo respecto de las pruebas que se pueda determinar que fueron exhibidas en el mismo acto de fecha 11 de febrero de 2021 a las 0:06 h.*
- IV. *Se tenga por no exhibido el MEMORIAL 2³⁷.*
- V. *Se inste a la Demandante a respetar los términos procesales fijados en el Calendario Procesal y los diversos acuerdos celebrados por las Partes en la Orden Procesal No. 1.*
- VI. *Se inste a la Demandante a copiar en todas las comunicaciones futuras a la totalidad de la representación jurídica de la Comisión.*

³⁴ Escrito de CFE de fecha 18 de febrero de 2021, capítulo de Consideraciones, páginas 3 a 8.

³⁵ Escrito de CFE de fecha 18 de febrero de 2021, puntos petitorios, páginas 8 y 9.

³⁶ Memorial de Demanda presentado por Empalme el 11 de febrero de 2021, a las 00:06 A.M.

³⁷ Memorial de Demanda presentado por Empalme el 11 de febrero de 2021, a las 19:44 horas.

VII. Se tenga por reservado el Derecho de CFE para pronunciarse respecto del contenido de los Anexos hasta que se otorgue el acceso a los mismos, ya que hasta la fecha no ha podido verificar su contenido, origen ni autenticidad.

VIII. Derivado del punto anterior, se solicita que el plazo de los 100 días para contestar la Demanda en términos del numeral IX del Calendario Procesal, comience a correr hasta que CFE tenga acceso a los Anexos de la Demanda a la luz de los hechos expuestos.

IX. Se suspenda la sustanciación del presente arbitraje en tanto se resuelva lo aquí manifestado y se tomen las demás medidas necesarias para restablecer el equilibrio procesal entre las Partes derivado de los hechos anteriormente mencionados y garantizar el debido proceso en el arbitraje en curso.”

51. Mediante correo electrónico de fecha 18 de febrero de 2021, la Demandante solicitó se le concediese hasta el 23 de febrero de 2021 para producir sus manifestaciones respecto de la comunicación de CFE en relación con la Decisión del Tribunal Arbitral del 17 de febrero de 2021. El Tribunal Arbitral concedió lo solicitado por la Demandante, mediante correo electrónico de la misma fecha. Además, mediante correo de fecha 23 de febrero de 2021 el Tribunal Arbitral solicitó a la Demandante que le proporcionase información en relación con mensajes de Dropbox con información sobre actividad en carpetas compartidas, a fin de entender si se trataba de nuevas pruebas o cambios a las ya presentadas por Empalme. La Demandante dio respuesta sobre lo anterior, mediante el escrito de Empalme a que se hace referencia en el siguiente párrafo³⁸.
52. Mediante correo electrónico de fecha 23 de febrero de 2021 y escrito adjunto al mismo, la Demandante formuló manifestaciones en relación con el escrito de la Demandada de fecha 17 de febrero de 2021. En su escrito, la Demandante presenta sus argumentos con el propósito de desvirtuar las pretensiones de CFE y, por las razones expuestas al respecto en su escrito, manifestó:
 - (i) su conformidad con que el plazo para presentar el Memorial de Contestación de CFE, empiece a correr una vez que ésta haya tenido acceso a los documentos anexos al Memorial de Demanda;
 - (ii) que el Memorial de Demanda no sufrió ninguna modificación sobre su texto, más allá de la referencia a los anexos;
 - (iii) que cualquier cuestión relacionada con la presentación del Memorial de Demanda, fue resuelta en definitiva por el Tribunal Arbitral en su comunicación de fecha 17 de febrero de 2021; y,

³⁸ Escrito de Empalme de fecha 23 de febrero de 2021, página 5.

- (iv) que desde el 11 de febrero de 2021, tres representantes de CFE contaron con pleno acceso a la carpeta compartida con los Anexos de Empalme y desde el 18 de febrero de 2021 todos los representantes de CFE contaron con acceso a la misma, independientemente de proporcionar en su escrito una liga en la que se ubican el Memorial de Demanda, sus Anexos, las Testimoniales y el Dictamen Pericial, con sus respectivos anexos³⁹.
53. Mediante correo electrónico de fecha 24 de febrero de 2021, el Tribunal Arbitral solicitó a la Demandada que manifestara lo que conviniese a sus derechos, exclusivamente en relación con las manifestaciones de la Demandante sobre las comunicaciones recibidas por el Tribunal Arbitral respecto a la actividad advertida en la carpeta de “Anexos Memorial de Demanda de Empalme”, en el depósito de Dropbox de la Demandante, en virtud de que esta última hacía referencia en su escrito citado en el párrafo anterior⁴⁰ a la información que le solicitó el Tribunal Arbitral el 23 de febrero de 2021. En la misma comunicación, el Tribunal Arbitral también solicitó a la Demandada la confirmación del acceso de todos sus representantes a la carpeta de Dropbox de la Demandante.
54. La Demandada respondió al Tribunal Arbitral mediante correo electrónico de fecha 25 de febrero de 2021 y escrito de la misma fecha adjunto al mismo, en el que manifestó:
- (i) no haber tenido acceso a la carpeta de Dropbox de la Demandante en la fecha que mencionó Empalme y, por ello, CFE no estuvo en aptitud de verificar la naturaleza de los cambios efectuados por su contraparte, pues ésta ha dejado de marcar copia de sus comunicaciones a ciertos representantes de CFE y, otros, habiendo recibido copia de la comunicación, no tuvieron acceso a la carpeta;
 - (ii) que “... ya se tiene acceso a los archivos digitales presentados por la contraparte a partir del escrito de 23 de febrero de 2021 a las 23:04 h. mismos que, dada la hora de su presentación ... fueron revisados hasta el día siguiente”;
 - (iii) la conducta de la Demandante *constituye* “... una franca violación a la Orden Procesal No. 1 y las buenas prácticas en arbitraje al modificar contenido probatorio sin la autorización ni supervisión del Tribunal Arbitral, hecho que no debe observarse como un evento aislado ... [y] ... al ser una situación análoga a la presentación tardía de un determinado material, Empalme debió solicitar autorización al Tribunal Arbitral y, en su caso, haber dado vista a CFE antes de realizar dicha modificación de manera unilateral”;
 - (iv) “[s]in perjuicio de las modificaciones divisadas por el propio Tribunal Arbitral, no debe pasar inadvertido que de la propia información de la Carpeta de Dropbox se desprende ...” que “... entre el 11 y el 19 de febrero de 2021 se siguió cargando información de manera furtiva ... a pesar de haber afirmado la Demandante que la terminación de la carga de documentación habría sido lograda el propio 11 de febrero de 2021 a las 13:30

³⁹ Escrito de Empalme de fecha 23 de febrero de 2021.

⁴⁰ Escrito de Empalme de fecha 23 de febrero de 2021, páginas 4 y 5.

h ...” en dicha carpeta no se encuentran ciertos anexos y, el A-050, está en formato EML, “... no legible sin comprometer el acceso a programas y datos sensibles relacionados con la mensajería electrónica de CFE”;

- (v) las últimas conductas de la Demandante “... bajo ningún concepto se circunscriben a los deberes y práctica de buena fe en el arbitraje y *el Tribunal Arbitral debe analizarlas a la luz de la Orden Procesal No. 1 y de las Directrices de la IBA sobre Representación de Parte en el Arbitraje Internacional*; y,
- (vi) solicita al Tribunal Arbitral *revisar las irregularidades expuestas por CFE y las nuevas conductas de la Demandante a la luz de lo expuesto en las comunicaciones de CFE, para no dejarlas sin consecuencia a fin de restaurar la igualdad y equidad procesal y, de ser el caso, resolver de conformidad lo solicitado por la Demandada en su escrito de fecha 18 de febrero de 2020 (sic)*⁴¹.

Orden Procesal No. 3

55. Habiendo analizado las posturas de las Partes, y llevado a cabo las deliberaciones que consideró necesarias, a fin de dar a las Partes un trato igualitario en el procedimiento de conformidad con el Artículo 14.4 (i) del Reglamento; y teniendo en cuenta el contexto de las circunstancias en que sucedieron los hechos controvertidos por las Partes y sus implicaciones de cara al procedimiento, así como las manifestaciones de la Demandante y de la Demandada, el Tribunal Arbitral dictó la Orden Procesal No. 3 de fecha 8 de marzo de 2021, transmitida a las Partes mediante correo electrónico de la misma fecha, conforme a la cual, en esencia:

- a. por las razones que se expresan en el capítulo de Antecedentes de dicha Orden, se confirmó lo resuelto por el Tribunal Arbitral en su comunicación de fecha 17 de febrero de 2021⁴², en el sentido de que el Memorial de Demanda y los archivos que forman parte de dicha carpeta, así como el segundo ejemplar del Memorial de Demanda, incluyendo su lista de Anexos, fueron presentados oportunamente por la Demandante;
- b. En virtud de lo anterior, para todos los efectos inherentes a la instrucción de la causa, los documentos que integrarán el expediente respectivo son el segundo ejemplar del Memorial de Demanda, incluyendo su lista de Anexos, así como la carpeta “Anexos al Memorial de Demanda de Empalme”, con todos los archivos que la integran, incluyendo declaraciones testimoniales y dictámenes periciales, con sus anexos y apéndices;
- c. el Tribunal reconoció que la Demandada no debía ser afectada en el plazo para responder al Memorial de Demanda, modificando el fijado en la Orden Procesal

⁴¹ Debió decir 18 de febrero de 2021.

⁴² Comunicación del Tribunal Arbitral de fecha 17 de febrero de 2021, citada en el párrafo 47 anterior.

No. 1 para empezar a correr a partir del día siguiente al 23 de febrero de 2021, fecha en que la Demandada reconoció que la Demandante proporcionó un enlace a la Carpeta de Dropbox accesible a través de contraseña, que permitiera la consulta y descarga libres de los citados Anexos sin necesidad de utilizar una cuenta autorizada; y,

- d. considerando las actuaciones procesales pendientes, así como los plazos para tal efecto, convenidos y reflejados en la Orden Procesal No. 1, se modificó el Calendario Procesal contenido en dicha Orden de conformidad con los artículos 14.4 (ii) y 14.5 del Reglamento, para quedar en los términos del Calendario Procesal modificado, contenido en dicha Orden Procesal No. 3.

56. Mediante comunicación de fecha 13 de mayo de 2021, la Demandada solicitó por las razones ahí mencionadas una prórroga de 20 días para la exhibición de su Contestación a la Demanda, manifestando su anuencia para que se concediera a la Demandante, *al menos, el mismo tiempo adicional en el desarrollo del arbitraje en sus distintas etapas procesales, en aras de velar por la equidad procesal y buscando que las Partes tuviesen la debida oportunidad para presentar su caso*. El Tribunal Arbitral dio vista a la Demandante el 15 de mayo de 2021, y esta última respondió mediante comunicación de fecha 19 de mayo de 2021, haciendo diversas manifestaciones además de expresar su anuencia para el otorgamiento de la prórroga solicitada por la Demandada.
57. El Tribunal Arbitral concedió mediante comunicación de fecha 24 de mayo de 2021 la prórroga solicitada, a reserva de emitir la Orden Procesal No. 4 con el nuevo Calendario Procesal; y para tal efecto, el Tribunal Arbitral planteó a las Partes diversas cuestiones de índole procesal, solicitándoles le presentasen una propuesta conjunta o, a falta de esta, sus propuestas individuales, en relación con el Calendario Procesal.
58. La Demandada respondió mediante comunicación de fecha 26 de mayo de 2021, formulando diversas manifestaciones en relación con la fecha propuesta para la celebración de la Audiencia, su preferencia porque esta se celebre mediante videoconferencia, y la extensión de los Memoriales Pre-Audiencia, respecto a los cuales manifestó que los mismos *deberían tener una extensión máxima de 15 hojas*⁴³ y, además, *las Partes definieron que estarían limitados* a la presentación de argumentos y pruebas en respuesta a los presentados en los escritos anteriores⁴⁴.
59. La Demandante respondió mediante comunicación de 28 de mayo de 2021 a lo solicitado por el Tribunal Arbitral. En dicha comunicación, además de referirse a cuestiones relativas al

⁴³ Orden Procesal No. 1, capítulo X (ESCRITOS), párrafo 11.

⁴⁴ Es decir, los Escritos de las Partes en relación con las Medidas Cautelares, las Contestaciones a los mismos, el Memorial de Demanda y la Contestación de Demanda, de conformidad con la Orden Procesal No. 1, capítulo X (ESCRITOS), ¶ 9.

Calendario Procesal, la Demandante se refirió a las manifestaciones de la Demandada en relación con la extensión de los Memoriales Pre-Audiencia y sugirió que se fijase *un límite de 70 hojas*, argumentando que *al pactarse dicha limitación a 15 hojas, la Demandante no tenía conocimiento de que, durante el transcurso del procedimiento, CFE continuaría realizando acciones relacionadas con la Central que podrían modificar las situaciones de hecho inicialmente planteadas por EMPALME*, citando ejemplos al respecto.

60. La Demandada respondió a su contraria el mismo 28 de mayo de 2021 para refutar las manifestaciones de la Demandante antes citadas, solicitando el otorgamiento de *un plazo razonable que le permitiera manifestarse sobre las cuestiones a que hizo referencia la Demandante* en dicha comunicación, *o bien desestimarlas en virtud de que la Demandante ya había tenido la oportunidad procesal de hacerlo*. La Demandante, mediante comunicación de fecha 29 de mayo de 2021, mencionó brevemente las razones por las que formuló las manifestaciones de que se trata y expresó *no tener ningún inconveniente con que se le diese oportunidad a CFE para manifestarse sobre el particular*. El Tribunal Arbitral concedió a la Demandada el plazo solicitado, mediante comunicación de fecha 31 de mayo de 2021.
61. La Demandada utilizó dicha oportunidad para abundar en las razones de su oposición al aumento de la extensión de los Memoriales Pre-Audiencia pretendida por la Demandante, manifestando en resumen que:
 - a. Las modificaciones al estado de la controversia, que le imputa la Demandante, son inexistentes en virtud de que:
 - (i) conforme a la Cláusula 18.4 del Contrato, en caso de demora injustificada del Contratista (Empalme) en la corrección de *Deficiencias Menores*, CFE podría efectuar la corrección, directamente o contratando a un tercero, con cargo del Contratista *ejecutando la Garantía de Cumplimiento y/o la Garantía Operativa*;
 - (ii) en virtud de lo anterior, la Demandante *intenta darle el carácter de hechos supervenientes a situaciones conocidas y predecibles, como consecuencia del incumplimiento en efectuar la corrección*, por lo que cualquier cuestión relacionada con el cierre de las *Deficiencias Menores* debió ser planteada en la Solicitud de Arbitraje o en el Memorial de Demanda y *no debe ser una razón válida para aumentar la extensión de los Memoriales Pre-Audiencia*; y,
 - (iii) las supuestas mutaciones al estado de las *Deficiencias Menores* fueron planteadas de manera genérica por la Demandante, al ser *omisa en señalar detalles suficientes que permitan identificar los hechos particulares que pudieran haber modificado el estado de la controversia*.

- b. El aumento de la extensión de los Memoriales Adicionales Pre-Audiencia representa *un riesgo a la equidad procesal*, en virtud de que:
- (i) las Partes no estarían en un plano de igualdad procesal en caso de concederse el aumento de la extensión de dichos Memoriales, ya que estos deben ser presentados en forma simultánea y, por tanto, el aumento de su extensión representa para la Demandada *un grave riesgo de de enfrentar la incertidumbre de que la Demandante presente su Memorial con argumentación novedosa sin oportunidad para que CFE pueda generar una verdadera defensa*; y,
 - (ii) la solicitud de aumento de la extensión planteada por la Demandante *tiene como potencial objetivo la presentación de nuevos argumentos y pretensiones*, ya que [a la fecha de dicha solicitud] CFE no había presentado su Memorial de Contestación de Demanda y, por tanto, *la única razón que explica la solicitud de Empalme es la intención de ampliar las argumentaciones y pretensiones expuestas en el Memorial de Demanda*.
- c. Los *acuerdos plasmados por las Partes en la Orden Procesal No. 1* [que incluyen los relativos a la extensión y contenido de los Memoriales Pre-Audiencia, conforme a las manifestaciones anteriores de la Demandada] deben ser respetados, de conformidad con el Artículo 14 del Reglamento y el Artículo 1435 del Código de Comercio.

Orden Procesal No. 4

62. El Tribunal Arbitral tomó en consideración las manifestaciones de las Partes, contenidas en las comunicaciones a que se ha hecho referencia, y después de deliberar en la medida que consideró necesaria emitió la Orden Procesal No. 4 de fecha 7 de junio de 2021, transmitida a las Partes mediante correo electrónico de la misma fecha, en relación con las cuestiones planteadas. Conforme a dicha Orden, entre otras cuestiones el Tribunal Arbitral resolvió que:
- a. la Audiencia se celebraría en forma presencial, y en caso de cambiar las condiciones sanitarias con motivo de la pandemia de COVID 19, y se justificase un cambio, lo resolvería el Tribunal Arbitral previa consulta con las Partes en la Conferencia Pre-Audiencia;
 - b. la Conferencia Pre-Audiencia se llevaría a cabo mediante videoconferencia, el 30 de noviembre de 2021;
 - c. la Audiencia se celebraría durante el período del martes 25 de enero de 2022 al 28 de febrero de 2022;
 - d. considerando las posiciones de ambas Partes y por las razones expresadas en la Orden, la extensión máxima de los Memoriales Pre-Audiencia sería de 30 páginas,

sin tomar en consideración portada, índice, lista de referencias, lista de anexos, lista de definiciones y cuestiones similares, de conformidad con el apartado X, párrafo 11, de la Orden Procesal No. 1; y,

- e. el Calendario Procesal, en consecuencia, fue modificado para quedar en los términos especificados en el nuevo Calendario Procesal contenido en esa misma Orden Procesal.
63. Las resoluciones del Tribunal Arbitral en los términos de la Orden Procesal No. 4 no fueron objetadas en forma alguna por cualquiera de las Partes. La Demandante formuló el mismo 7 de junio de 2021 una manifestación aclaratoria en relación con el párrafo 5, inciso c) de la sección de antecedentes de dicha Orden, sin que dicha manifestación constituyera una objeción de su parte ni tuviera relevancia para los efectos de dichas declaraciones o para el procedimiento, que siguió su curso de la manera que se consigna en este laudo.

Contestación a la Demanda

El contenido y términos de la Contestación a la Demanda, se comentan más adelante al realizar el análisis del fondo del caso.

64. La Demandada presentó su Contestación a la Demanda adjuntándola a su correo electrónico de fecha 23 de junio de 2021, con el que proporcionó la liga electrónica necesaria para acceder a la información anexa a la Contestación a la Demanda, contenida en la plataforma Microsoft – OneDrive.

Solicitud de Demandante, para Exhibición de Documentos por CFE

65. La Demandante formuló en tiempo su Solicitud de Exhibición de Documentos mediante correo electrónico de fecha 23 de julio de 2021, al que adjuntó (i) carta de presentación de Solicitud de Exhibición de Documentos de Empalme; (ii) Solicitud de Exhibición de Documentos de Empalme, consistente en una tabla tipo “*Redfern Schedule*”; y (iii) Anexo Único de dicha Solicitud, intitulado “*Lista de señales diezminutales solicitadas a CFE período 1 febrero 2019 a 12 marzo 2020*”.

Solicitud de Demandada para Exhibición de Documentos por Empalme, y Entrega de Documentos no Objetados

66. La Demandada solicitó en tiempo la exhibición de documentos en poder o bajo el control de su contraria, mediante correo electrónico de fecha 23 de julio de 2021, al que adjuntó su Solicitud de Exhibición de Documentos de CFE, que contiene una sección introductoria en apoyo de lo solicitado, seguida de la identificación de los documentos requeridos, en una tabla tipo “*Redfern Schedule*”.

Entrega por CFE, de Documentos Solicitados por Empalme y no Objetados por CFE; y Formulación de Objeciones de la Demandada, a Exhibición de Documentos Solicitados por Empalme

67. Mediante correo electrónico de fecha 12 de agosto de 2021, último día del plazo fijado para el desahogo de este hito del procedimiento, la Demandada informó al Tribunal Arbitral que, debido al volumen de la documentación no objetada, que se presentaría de manera voluntaria, las Partes acordaron que la información correspondiente a las solicitudes no objetadas se exhibiera el 13 de agosto de 2021, sin afectar las siguientes etapas del Calendario Procesal. La Demandante respondió a lo anterior mediante correo electrónico de fecha 12 de agosto de 2022, confirmando el acuerdo de las Partes.
68. Mediante un segundo correo electrónico de fecha 12 de agosto de 2021, al que la Demandada adjuntó la tabla tipo “*Redfern Schedule*” presentada en oportunidad por la Demandante, la primera formuló en tiempo, en la columna de dicha tabla existente para tal efecto, las objeciones de CFE a la exhibición de documentos solicitados por Empalme.
69. El 13 de agosto de 2021, la Demandada entregó en tiempo, mediante un dispositivo tipo “disco duro” que adjuntó a comunicación de la misma fecha, los documentos solicitados por Empalme y no objetados por CFE.

Entrega por Empalme, de Documentos Solicitados por CFE y no Objetados por Empalme; y Formulación de Objeciones de la Demandante, a Exhibición de Documentos Solicitados por CFE

70. Mediante correo electrónico de fecha 12 de agosto de 2021, la Demandante adjuntó comunicación de la misma fecha en la que manifestó que exhibía los documentos solicitados por la Demandada *en los términos que se detallaron en dicha comunicación*, haciendo diversas manifestaciones en relación con los mismos. Asimismo, en el último párrafo del correo antes referido la Demandante manifestó que, *de conformidad con lo acordado por las Partes, Empalme estaría enviando a CFE una liga con toda la documentación que se exhibe*, el 13 de agosto de 2021.
71. Además de lo señalado en el párrafo anterior, la Demandante adjuntó al mismo correo electrónico que ahí se cita, la tabla tipo “*Redfern Schedule*” presentada en oportunidad por la Demandada, en la que la Demandante formuló en tiempo, en la columna de dicha tabla existente para tal efecto, las objeciones de Empalme a la exhibición de documentos solicitados por CFE.

Réplica de la Demandante a las Objeciones de CFE para la Entrega a Empalme, de Documentos Solicitados por ésta

72. Mediante correo electrónico de fecha 1 de septiembre de 2021, al que la Demandante adjuntó la tabla tipo “*Redfern Schedule*” presentada en oportunidad por la propia Demandante, Empalme formuló en tiempo, en la columna de dicha tabla existente para tal efecto, la Réplica de Empalme a las objeciones de CFE que ahí mismo se consignan, a la exhibición de documentos solicitados por Empalme.

Réplica de la Demandada a las Objeciones de Empalme, para la Entrega a CFE de Documentos Solicitados por ésta

73. Mediante correo electrónico de fecha 1 de septiembre de 2021, al que la Demandada adjuntó la tabla tipo “*Redfern Schedule*” presentada en oportunidad por la propia Demandada, CFE formuló en tiempo, en la columna de dicha tabla existente para tal efecto, la Réplica de CFE a las objeciones de Empalme que ahí mismo se consignan, a la exhibición de documentos solicitados por CFE.

Orden Procesal No. 5

74. El Tribunal Arbitral deliberó sobre las posiciones expresadas por ambas Partes en los términos de sus comunicaciones arriba citadas, en relación con sus respectivas solicitudes para la exhibición de documentos en poder o bajo el control de la Parte contraria, considerando las objeciones formuladas por la Parte a quien se solicitó la exhibición, así como la réplica de su contraria.
75. Como resultado sus deliberaciones, a fin de dar un trato igualitario a las Partes de conformidad con los artículos 14.4 y 22.1 del Reglamento y tomando además como referencia el Artículo 3 de las Reglas de la IBA sobre Práctica de Prueba en el Arbitraje Internacional de 2010 (“Reglas de la IBA”), invocadas por la Demandante y aplicables para este arbitraje de conformidad con lo acordado por las Partes en el párrafo 16 del capítulo X (Escritos) de la Orden Procesal No. 1, el Tribunal Arbitral resolvió en los términos de la Orden Procesal No. 5 de fecha 13 de septiembre de 2021, transmitida a las Partes mediante correo electrónico del mismo día, respecto de la exhibición de los documentos y categorías de documentos que fueron objeto de controversia entre las Partes.
76. En virtud de lo señalado en los dos párrafos precedentes, las resoluciones dictadas por el Tribunal Arbitral pueden ser resumidas así:
- a. en términos generales, los Documentos exhibidos por cada una de las Partes a petición de su contraria pueden serles suficientes para sustentar su caso y sus pretensiones; así como en virtud de la naturaleza, generalidad y volumen de los Documentos e información

adicionales solicitados por las Partes y materia de sus objeciones y réplicas, ninguna de estas justificó la necesidad de ordenar la exhibición solicitada;

- b. se autorizó a las Partes a presentar, a más tardar el 28 de septiembre de 2021, aquella información o Documento complementario que considerasen relevante y de importancia material, a condición de que formase parte de la Solicitud de Exhibición de Documentos formulada por su contraparte, sea anterior a la misma y esté comprendida dentro de dicha Solicitud;
 - c. en virtud de sus propias manifestaciones, la Demandada debería exhibir a más tardar el 28 de septiembre de 2021 los documentos números 7, 8, 10, 28 y 51, solicitados por la Demandante o, en caso contrario, no podrían ser incluidos en los Memoriales Pre-Audiencia previstos en el Calendario Procesal;
 - d. se denegó la exhibición de los Documentos números 31, 32, 34 y 35, solicitados por la Demandante, porque además de tratarse de información relativa a centrales ajenas al Contrato y a la controversia objeto de este arbitraje, las razones expresadas por la Demandante parten de una mera presunción suya; y
 - e. respecto a las categorías de Documentos número 5 y 23, solicitadas por la Demandante, de las razones que esta expresa para solicitar su exhibición se desprende que no atañen a cuestiones relativas a la sustentación de las pretensiones de la Demandada, sino de cuestiones sobre las cuales la Demandante tiene la carga de la prueba.
77. Mediante correo electrónico de fecha 24 de septiembre de 2021, al que adjuntó comunicación de la misma fecha, la Demandante *objetó lo resuelto por el Tribunal Arbitral en la Orden Procesal No. 5, solicitando la reconsideración y modificación de la misma*, en los términos expuestos en la comunicación citada. En su comunicación, la Demandante manifestó que *se reservaba el derecho de robustecer, ampliar y/o profundizar sus objeciones en relación con el contenido* de dicha Orden, que cuestionó pormenorizadamente en dicha comunicación, y concluyó manifestando que *se reservaba el derecho de formular manifestaciones adicionales en los hitos procesales pendientes [a esa fecha] del procedimiento arbitral*.
78. Según se desprende de la comunicación arriba citada, independientemente de la reserva de derechos que formuló en la misma la Demandante, esta última manifestó lo siguiente, como fundamento de sus objeciones y de la procedencia de su solicitud de reconsideración y modificación de las decisiones del Tribunal Arbitral:
- a. la Orden Procesal No. 5 vulnera el principio de igualdad procesal al no permitir a Empalme acceder al caudal probatorio en posesión de CFE, dejándola sin plena oportunidad de hacer valer sus derechos, en virtud de que, aun cuando Empalme inició el arbitraje como Demandante, lo hizo porque CFE ejecutó la Carta de Crédito HSBC sin proporcionar documentación que acreditara el monto ejecutado, y tuvo que hacerlo sin tener acceso a la información y documentos, por estar en poder de CFE;

- b. dado que CFE ejecutó la Carta de Crédito HSBC, la Demandada debe acreditar (i) las erogaciones realizadas para la atención de Deficiencias Menores (DMs) y Reclamos de Garantía (RGs); (ii) que dichas erogaciones eran estrictamente necesarias y razonables; (iii) la procedencia de la atención de las DMs y RGs; y (iv) que Empalme era responsable de la atención de las DMs y RGs atendidas por CFE;
 - c. dado que la Central no está en posesión de Empalme desde el 26 de marzo de 2019 (fecha de Aceptación Provisional), existen documentos imprescindibles para el caso, que Empalme no tiene en su poder y están en poder de CFE; y al no ordenarse su exhibición, sin aplicarse inferencias negativas en caso de no exhibirlos CFE, se vulneraría el principio de igualdad procesal y Empalme quedaría sin oportunidad de hacer valer sus derechos, pues CFE dispondría de documentación a la que no tiene acceso Empalme;
 - d. los documentos solicitados por Empalme -que la Demandante detalla en su comunicación y cuya importancia explica- son relevantes para el caso y sustanciales para su resolución, por lo que su falta de exhibición por la Demandada, que los tiene en su poder, no puede ser en perjuicio de la solicitante;
 - e. la Orden Procesal en cuestión es omisa en resolver sobre diversas Solicitudes de Exhibición de Documentos planteadas por Empalme, que esta especifica en su comunicación, y esa omisión no es menor por tratarse de documentación material y relevante, por las razones ahí expresadas, como sucede en el caso del Reporte de Causa Raíz que menciona la Demandante e ilustra con el Anexo 1 de su comunicación; y
 - f. la exhibición de los documentos solicitados no puede dejarse al juicio de la Parte a la cual se le solicitan, y se refiere a la documentación exhibida por CFE, relacionada con el intercambio de comunicaciones con Doosan Skoda, que la Demandada argumentó no tener disponible por estar en control de la Empresa Productiva Subsidiaria Generación III, que es información a la que la Demandada tiene fácil acceso, como acredita con fines ejemplificativos con los Anexos 2 y 3 de su comunicación.
79. Mediante correo electrónico de fecha 25 de septiembre de 2021, el Tribunal Arbitral invitó a la Demandada a manifestar lo que conviniese a sus intereses en relación con las manifestaciones formuladas por su contraria en la comunicación que se cita en los dos puntos anteriores, sin perjuicio de que la Orden Procesal No. 5 continuaría en vigor en sus términos mientras el Tribunal Arbitral no resolviese sobre lo solicitado por la Demandante.
80. La Demandada atendió la invitación del Tribunal Arbitral mediante correo electrónico de fecha 29 de septiembre de 2021, al que adjuntó comunicación de la misma fecha en la que manifiesta que la Demandante *se ha conducido en múltiples ocasiones con mala fe, violando los acuerdos procesales de las Partes y las Órdenes Procesales emitidas por el Tribunal Arbitral*, citando diversos hechos para sustentar sus afirmaciones. Manifestó asimismo la Demandada que, por lo que hace a los puntos particulares del escrito de Objeción y Solicitud de Reconsideración presentado por la Demandante, CFE reiteró que había transmitido a la

Demandante la totalidad de la información y documentación en posesión de la Demandada, en dos etapas; la primera el 13 de agosto de 2021 y la segunda el 28 de septiembre de 2021.

81. Manifestó además la Demandada en la misma comunicación, en relación con la Solicitud No. 4 del *Cronograma Redfern* de Empalme, que mostró su ánimo de colaboración al comprometerse a presentar el “Reporte de Causa Raíz”, que no estaba aún en su poder, y lo transmitiría a la Demandante tan pronto como lo recibiera; sin embargo, agregó que, al recibir el mismo de Doosan Skoda, advirtió que contiene una manifestación del Proveedor, en el sentido de que el mismo es confidencial y no podrá ser usado o aportado como prueba en cualquier procedimiento judicial, arbitral o similar.
82. En relación con lo anterior, la Demandada manifestó su inquietud sobre las responsabilidades en que pudiera incurrir en caso de presentar ese documento en el arbitraje sin el consentimiento de Doosan Skoda, y solicitó al Tribunal Arbitral *la definición y adopción de las medidas que estimase pertinentes y facultasen a la Demandada para presentar dicho “Reporte de Causa Raíz” sin causar con ello un menoscabo en su patrimonio ni derechos.*
83. En sus peticiones en los términos de la comunicación de que se trata, la Demandada solicitó al Tribunal: (i) se desestimen las solicitudes de la Demandante y se deniegue la modificación de los términos de la Orden Procesal No. 5; (ii) se adopten las medidas idóneas necesarias para la exhibición del “Reporte de Causa Raíz” citado; (iii) se tomen en consideración las conductas de la Demandante, para efectos de la determinación y asignación de los costos del arbitraje; y (iv) se tenga por reservado el derecho de CFE para realizar las manifestaciones pertinentes en relación con las cuestiones abordadas en su comunicación.
84. Mediante comunicación de correo electrónico de fecha 30 de septiembre de 2021, la Demandante solicitó se le concediese *un plazo para manifestarse de manera breve y en relación únicamente con las nuevas manifestaciones de CFE respecto a la exhibición del “Reporte de Causa Raíz” que CFE dice haber recibido de Doosan Skoda recientemente.* El Tribunal Arbitral concedió mediante comunicación de correo electrónico de fecha 30 de septiembre de 2021 lo solicitado por la Demandante, pidiendo a la Demandada abstenerse de formular manifestaciones adicionales en relación con las que en su caso formulase su contraria, toda vez que el Tribunal Arbitral deliberaría sobre los puntos de vista de ambas Partes, a fin de resolver lo conducente.
85. La Demandante formuló en tiempo sus manifestaciones mediante comunicación de fecha 4 de octubre de 2021, adjunta a su comunicación de correo electrónico de la misma fecha. En los términos de esta última comunicación:
 - a. la Demandante hace una reseña cronológica de las manifestaciones de CFE respecto al “Reporte de Causa Raíz” solicitado por Empalme en el concepto número 4 de su Solicitud de Exhibición de Documentos, con algunas observaciones al respecto; y acto seguido,

hace diversas manifestaciones argumentativas en relación con la relevancia del “Reporte de Causa Raíz”;

- b. controvierte la *supuesta confidencialidad del “Reporte de Causa Raíz”* aducida por la Demandada, aduciendo que la *manifestación del Proveedor* a que se refiere la Demandada no constituye estrictamente un acuerdo de confidencialidad que obligue a la Demandada, además de que conforme a la Cláusula 30.4 del Contrato “el proceso arbitral será confidencial y cualquier Persona que participe en el mismo deberá guardar reserva”, por lo que *toda la documentación que se exhiba y comparta en en proceso arbitral gozará de esa protección*;
- c. al ser Empalme quien adquirió la Turbina de Vapor; al haberse presentado la supuesta problemática con dicha turbina antes de la Aceptación Provisional de la Central; y al pretender la Demandada trasladar a Empalme la cantidad de MXN\$206’000,000 por concepto de los trabajos realizados sobre la turbina, *resulta ilógico que se pretenda limitar a Empalme el acceso a la documentación en la que supuestamente se detalla el origen de la problemática*; y,
- d. dada la relevancia de esta cuestión *para la protección del derecho de adecuada defensa de Empalme*, esta manifestó su disposición para llevar a cabo una audiencia sobre esta cuestión, de considerarlo necesario el Tribunal Arbitral; y,
- e. *Empalme se reservó el derecho de iniciar cualquier acción judicial que pudiera ser procedente para la obtención de dicha documentación, incluyendo, sin limitar, las previstas en los artículos 1444 y 1446 del Código de Comercio.*

Orden Procesal No. 6

86. El Tribunal Arbitral deliberó sobre las posiciones expresadas por las Partes en los términos de sus comunicaciones arriba citadas y resolvió sobre las cuestiones planteadas en los términos de la Orden Procesal No. 6 de fecha 11 de octubre de 2021, en la que se consignaron en detalle las cuestiones que tuvo en consideración el Tribunal al dictar sus resoluciones en el capítulo de “Consideraciones”. La Orden Procesal a que se refiere esta sección fue remitida a las Partes mediante correo electrónico de fecha 11 de octubre de 2021; entre otras cuestiones:

- a. se ordenó a la Demandada producir el reporte denominado “Final Technical Report – Root Cause Analysis and Turbine Passport” preparado por Doosan Skoda (Reporte Final de Causa Raíz), así como cualquier otro reporte que se ajustase a la documentación solicitada por la Demandante en el numeral 4 de su Solicitud de Exhibición de Documentos, que se encontrare en posesión o bajo la custodia o control de la Demandada; quedando sujeta la entrega del reporte especificado y de cualquier otro documento incluido en esta categoría, a que la Demandante suscribiese una manifestación (“Declaración de Confidencialidad”) obligándose a mantener dicho reporte y

documentos de manera confidencial, así como a abstenerse de utilizarlos para un fin distinto al de sostener su posición o defensa en el presente arbitraje;

- b. se ordenó a la Demandada la exhibición de documentos descritos en los numerales 7, 8, 10, 28, 51, 71, 73 y 74 de la Solicitud de Exhibición de Documentos de la Demandante, respecto de los cuales manifestó no tener objeción para su entrega y manifestó que se encontraban en posesión de CFE Generación III, Empresa Productiva Subsidiaria de la Demandada, especificando que la entrega de dichos documentos también quedaba sujeta a que la Demandante hubiese cumplido el requisito de entregar la Declaración de Confidencialidad antes referida;
 - c. en caso de incumplir la Demandada con su obligación de entregar la información y documentos a que se refiere esta Orden Procesal, conforme a lo establecido en la Orden Procesal No. 5, no podrían ser incluidos por la Demandada en el Memorial Pre-Audiencia previsto en el Calendario Procesal; en cuyo caso, lo anterior debería ser entendido sin perjuicio de lo que establece el artículo 9.5 de las Reglas de la IBA;
 - d. las demás disposiciones de la Orden Procesal No. 5 seguirían vigentes en sus términos y prevalecerían, con excepción de las cuestiones específicas objeto de la Orden Procesal No. 6; asimismo, el Calendario Procesal contenido en la Orden Procesal No. 4 seguiría vigente en sus términos.
87. El Tribunal Arbitral no recibió objeción alguna de cualquiera de las Partes en relación con las resoluciones contenidas en la Orden Procesal No. 6; y, de hecho, a partir del 14 de octubre de 2021 las Partes comenzaron a proceder de conformidad con dichas resoluciones. La Demandante remitió comunicación de correo electrónico de fecha 14 de octubre, al que adjuntó: (i) carta de la misma fecha, con manifestaciones sobre producción de documentos conforme a la Orden Procesal No. 6, con los documentos Anexo 1, A-062 y Oficio H62WO-0269, así como sobre la entrega de su Declaración de Confidencialidad; y (ii) Declaración de Confidencialidad firmada. La Demandada formuló manifestaciones el mismo día mediante correo electrónico, en relación con la exhibición de los documentos ordenada por el *cuarto dispositivo* de la Orden Procesal No. 6, así como en relación con la exhibición del Reporte Final de Causa Raíz y las condiciones para su entrega a la Demandante. La Demandante, por su parte, manifestó su anuencia con dichas condiciones mediante comunicación de correo electrónico de fecha 15 de octubre de 2021.
88. En virtud de la coincidencia de ambas Partes en relación con la entrega de la Declaración de Confidencialidad de la Demandante y del Reporte Final de Causa Raíz, el Tribunal Arbitral indicó a las Partes mediante comunicación de correo electrónico de fecha 15 de octubre de 2021, la mecánica a seguir para la entrega de dichos documentos.

Primera Declaración de Confidencialidad

89. La Demandante entregó a la Demandada el 18 de octubre de 2021 la versión original con firma autógrafa de la Declaración de Confidencialidad, y el mismo día lo comunicó a la propia Demandada y al Tribunal Arbitral, mediante correo electrónico de la misma fecha al que adjuntó copia del acuse de recibo de la Demandada. La Demandada respondió el mismo día, mediante correo electrónico de fecha 18 de marzo de 2021 y comunicación adjunta a la misma, manifestando su inconformidad con los términos de dicha Declaración de Confidencialidad, por no cumplir cabalmente con los lineamientos indicados en la Orden Procesal No. 6.

Orden Procesal No. 7

90. La Orden Procesal No. 7 a que se refiere esta sección, aun cuando fue emitida el 19 de octubre de 2021 y fue comunicada a las Partes a las 20:12 horas de dicha fecha mediante correo electrónico, fue el resultado de deliberaciones del Tribunal Arbitral en las que este último tuvo en consideración las comunicaciones presentadas por las Partes durante el período del 14 de octubre de 2021 al 18 de octubre de 2021; es decir que, si bien la comunicación de la Demandada de fecha 19 de octubre de 2021, que se comenta en el punto siguiente, fue transmitida ese día a las 19:20 horas, en ese tiempo el Tribunal Arbitral estaba deliberando sobre las comunicaciones previas de las Partes, presentadas durante el período referido, así como sobre los términos en que sería emitida la Orden Procesal No. 7. Por las circunstancias mencionadas, la comunicación de la Demandada, antes citada, pasó inadvertida en ese momento para el Tribunal Arbitral al emitir la Orden Procesal No. 7, mediante la cual el Tribunal Arbitral:
- a. ordenó a la Demandante ajustar su Declaración de Confidencialidad a lo indicado en el punto resolutivo 2 de la Orden Procesal No. 6 y remitirla a más tardar el viernes 22 de octubre de 2021; y, además ratificó que, conforme a lo ordenado en dicha Orden Procesal No. 6, debería entregar físicamente a la brevedad a la Demandada el documento original, con firma autógrafa, de dicha Declaración de Confidencialidad;
 - b. ordenó a la Demandada entregar a la Demandante, a más tardar el día hábil siguiente a la fecha en que la Demandante hubiese dado cumplimiento a lo anterior, la versión en inglés del Reporte Final de Causa Raíz, y entregar a la Demandante la versión en español de dicho Reporte tan pronto como la recibiese, sujeto a que la Demandante hubiese dado cumplimiento a lo indicado en el párrafo anterior; y
 - c. resolvió que las demás disposiciones de la Orden Procesal No. 5 y de la Orden Procesal No. 6 seguirán vigentes en sus términos y prevalecerían, con excepción de las cuestiones específicas objeto de la propia Orden Procesal No. 7, y el Calendario Procesal contenido en la Orden Procesal No. 4 seguiría vigente en sus términos.

91. Mediante la citada comunicación de correo electrónico de fecha 19 de octubre de 2021, la Demandada había confirmado su inconformidad con los términos de la Declaración de Confidencialidad suscrita por la Demandante (ya expresada en su comunicación del 18 de octubre de 2021), solicitando al Tribunal Arbitral *la emisión de nuevas instrucciones a la luz de lo expresado en la carta de CFE* sobre dicha Declaración. Además de lo anterior, la Demandada informó en esa misma comunicación que *ya había recibido la versión en español del Reporte Final de Causa Raíz*, que entregaría al Tribunal Arbitral junto con la versión en inglés de dicho Reporte, para ser entregadas ambas por el Tribunal a la Demandante una vez satisfechos por Empalme los requisitos para tal efecto.

Segunda Declaración de Confidencialidad

92. Mediante correo electrónico posterior de fecha 19 de octubre de 2021, en respuesta a lo manifestado por la Demandada en sus comunicaciones de fechas 18 de octubre de 2021 y 19 de octubre de 2021, así como a lo dispuesto en la Orden Procesal No. 7:
- a. la Demandante manifestó *no estar de acuerdo con lo argüido por la Demandada y el sustento de su objeción, por considerar que la Declaración de Confidencialidad* [es decir la entregada el 18 de octubre de 2021] *atiende el espíritu de la Orden Procesal No. 6, así como a la esencia de una declaración de confidencialidad y busca el justo balance con los derechos de EMPALME; y,*
 - b. la Demandante manifestó además que, *en estricto cumplimiento a lo ordenado por el Tribunal Arbitral en la Resolución 1 de la Orden Procesal No. 7, hacía entrega de una nueva versión de la Declaración de Confidencialidad* [de fecha 19 de octubre de 2021, adjunta al correo electrónico citado] *en la que había sido suprimida la oración referida por el Tribunal Arbitral en la Orden Procesal No. 7.*
93. Mediante escrito de fecha 21 de octubre de 2021, adjunto a comunicación de correo electrónico de la misma fecha, la Demandada nuevamente objetó el texto de la segunda versión de dicha Declaración de Confidencialidad enviada el 19 de octubre de 2021 por la Demandante. Esta última respondió el mismo día, mediante correo electrónico, en el que solicitó que se le otorgase un término para contestar a las manifestaciones de CFE el o antes del 25 de octubre de 2021. El Tribunal Arbitral concedió el término solicitado por la Demandante mediante correo electrónico de fecha 22 de octubre de 2021.
94. La Demandante contestó a las objeciones de la Demandada mediante escrito de fecha 22 de octubre de 2021, que adjuntó a comunicación de correo electrónico de esa misma fecha. En dicho escrito, la Demandante solicitó al Tribunal Arbitral *declarar improcedentes las nuevas objeciones planteadas por CFE en relación con la Declaración de Confidencialidad de fecha 19 de octubre de 2021, y ordenar de inmediato la exhibición del Reporte Doosan Skoda.*

95. En sustento de su petición, la Demandante manifestó que, *en cumplimiento de la Orden Procesal No. 7, en la nueva versión de la Declaración de Confidencialidad, presentada el 19 de octubre de 2021, la Demandante eliminó la totalidad del texto objeto de la controversia y, por tanto, las objeciones formuladas por CFE mediante su escrito de fecha 21 de octubre de 2021 eran nuevas y recaían sobre partes incluidas desde el texto original de dicha Declaración, que no solo no habían sido controvertidas por la Demandada en su escrito de fecha 18 de octubre de 2021 y por tanto fueron consentidas, sino que esas partes del texto fueron citadas por CFE en dicho escrito, sin realizar manifestación u oposición alguna al respecto.*
96. Además de lo anterior, la Demandante resaltó el hecho de que, habiendo enviado la primera Declaración de Confidencialidad a la Demandada el 14 de octubre de 2021, *no fue sino hasta el 18 de octubre de 2021 que CFE, una vez recibido el documento físico firmado, decidió hacer manifestaciones; lo cual, según manifestaciones de la Demandante, puso de manifiesto que la conducta de CFE había sido en total contravención al principio de eficiencia procesal y evidenció las continuas tácticas dilatorias de CFE para evitar o, al menos, retrasar la entrega del Reporte Doosan y, en consecuencia, perjudicar la debida defensa de la Demandante.*
97. Tomando en consideración lo manifestado por las Partes mediante sus respectivas comunicaciones intercambiadas durante el período del 19 de octubre de 2021 al 22 de octubre de 2021 en relación con la Orden Procesal No. 7 de fecha 11 de octubre de 2021, el Tribunal Arbitral analizó la segunda Declaración de Confidencialidad presentada por la Demandante, a la luz de sus manifestaciones y de lo dispuesto expresamente en la Orden Procesal No. 6 y en la Orden Procesal No. 7. Como se advierte conforme a los términos de su comunicación de correo electrónico a las Partes de fecha 26 de octubre de 2021, el Tribunal Arbitral consideró justificadas las objeciones de la Demandada en virtud de que dicha Declaración no dio cumplimiento a lo ordenado por el Tribunal Arbitral en las órdenes procesales antes citadas.
98. En la citada comunicación de 26 de octubre de 2021, el Tribunal Arbitral instó a ambas Partes a proceder en forma tal que evitasen cualquier demora o erogación innecesaria e hiciesen posible una conducción eficiente y expedita del procedimiento, de conformidad con los artículos 14.4 y 28.4 del Reglamento; y asimismo, instó a la Demandante a dar cumplimiento a la brevedad a lo prescrito en las órdenes procesales antes citadas.

Tercera Declaración de Confidencialidad

99. La Demandante respondió el mismo 26 de octubre de 2021 mediante comunicación de correo electrónico, manifestando en la misma que, *en aras [de] evitar más demoras y para hacer posible la conducción eficiente y expedita del procedimiento, solicitaba se realizase una*

videoconferencia entre el Tribunal Arbitral y las Partes, para que se pudiesen precisar los términos en que debía quedar redactada la Declaración de Confidencialidad.

100. El Tribunal Arbitral deliberó sobre lo manifestado por la Demandante y, mediante un segundo correo electrónico del mismo 26 de octubre de 2021, comunicó a las Partes que, en congruencia con el propósito de lograr una conducción eficiente y expedita del procedimiento, consideraba innecesaria la videoconferencia propuesta por la Demandante; y por tanto, conforme a lo solicitado por esta última en su correo precedente, indicó los términos en que podría quedar redactado el tercer párrafo de la Declaración de Confidencialidad, para dar cumplimiento a lo dispuesto en las órdenes procesales citadas. En la misma fecha y por la misma vía, la Demandada acusó recibo y la Demandante manifestó que *se haría el cambio correspondiente y enviaría la versión electrónica firmada en cuanto fuese posible.*
101. La Demandada envió una comunicación adicional mediante correo electrónico el 27 de octubre de 2021, manifestando en seguimiento de la comunicación precedente del Tribunal Arbitral que, *en aras de procurar una solución expedita a las cuestiones relacionadas con la Declaración de Confidencialidad, CFE estimaba necesario precisar lo que a su juicio constituía el punto del enfrentamiento de posturas respecto del alcance de las obligaciones de confidencialidad de la Demandante;* y una vez formulada tal precisión, la Demandada manifestó que *se adhería al texto sugerido por el Tribunal Arbitral, agregando una pequeña modificación,* consistente en la adición de una palabra, que a continuación se resalta, con lo cual el tercer párrafo de la Declaración de Confidencialidad indicaría que: *“La divulgación de la Información Confidencial únicamente será permitida en la medida que ...”.* El Tribunal tomó nota del planteamiento de la Demandante mediante correo electrónico de la misma fecha y, en aras de dejar zanjada la cuestión materia de debate, invitó a la Demandante a hacer la adición solicitada por su contraria, de considerarla pertinente.
102. Mediante correo electrónico de fecha 27 de octubre de 2021, la Demandante envió una versión actualizada de la Declaración de Confidencialidad, *en cumplimiento de lo especificado por el Tribunal Arbitral en sus comunicaciones del 26 y 27 de octubre de 2021,* en la que incorporó la petición adicional de su contraria; y manifestó además que, *en aras de evitar mayores dilaciones al procedimiento,* solicitaba a la Demandada que, en virtud del envío de la Declaración de Confidencialidad ya realizado por ese medio a CFE, *entregase de inmediato el Reporte Doosan Skoda, sin perjuicio de que se entregaría la versión física con firma autógrafa, en tanto llegase por mensajería.*
103. Mediante correo electrónico de fecha 1 de noviembre de 2021, la Demandada hizo del conocimiento del Tribunal Arbitral que en esa fecha había recibido la versión autógrafa de la Declaración de Confidencialidad suscrita por la Demandante y, en virtud de ello, adjuntó a su correo las versiones del documento denominado “Final Technical Report – Root Cause

Analysis and Turbine Passport” elaborado por Doosan Skoda Power, es decir, el Reporte Final de Causa Raíz.

104. En la misma fecha, la Demandante solicitó mediante correo electrónico a su contraria *remitir el correo electrónico mediante el cual Doosan Skoda hizo entrega del Reporte citado, en sus archivos nativos en formato “.msg”, en virtud de que cuando se exhiben documentos en versiones pdf, word, excel o programas análogos, debe ser evidenciable que no han sufrido alteración alguna desde la fecha de su elaboración o desde que fueron compartidos.* Adicionalmente, mediante correo electrónico de fecha 4 de noviembre de 2021 los representantes de la Demandante *hicieron notar que a esa fecha no habían recibido el correo electrónico solicitado o alguna manifestación de CFE al respecto.*
105. Mediante correo electrónico de 4 de noviembre de 2021 el Tribunal Arbitral consideró improcedente lo solicitado por la Demandante en su comunicación de fecha 1 de noviembre de 2021, tomando en consideración, en síntesis, la circunstancia de que en su comunicación de 24 de septiembre de 2021 así como como en oportunidades anteriores, la Demandante no hizo mención alguna de la posibilidad de que los mensajes de correo electrónico que la Demandada presentó como prueba D-255 estuviesen alterados; razón por la cual, en virtud de la ausencia de elementos que pudieran advertir sobre la existencia de alteraciones, el Tribunal seguía sin advertir elementos que pudieran constituir indicios de alteraciones.
106. Mediante comunicación de correo electrónico de fecha 9 de noviembre de 2021, la Demandante manifestó que de la resolución citada se desprendía que el Tribunal Arbitral estaba haciendo referencia a un correo que no está relacionado con la petición de Empalme o el Reporte Final de Causa Raíz, manifestando que entendía que *la intención del Tribunal había sido contar con mayores elementos que pudieran acreditar la necesidad de exhibir los correos objeto de su petición en formato “.msg” y, por tanto, hacía notar que (i) las versiones español e inglés del Reporte en formato PDF, fueron creadas utilizando “PixelPlanet PdfEditor”, que es una aplicación de edición del PDF, pero no se advierte quién lo elaboró; y (ii) el documento en español fue creado el 11 de mayo de 2021 y modificado por última vez el 18 de octubre de 2021, mientras que el documento en inglés también fue creado el 11 de mayo de 2021 y fue modificado por última vez el 20 de septiembre de 2021.*
107. Lo anterior, según afirma la Demandante, pone de manifiesto que *la autoría de los documentos es incierta, las fechas de su modificación era muy reciente y ambas versiones tienen la misma fecha de creación, que es anterior a la etapa de intercambio de documentos y podría implicar que CFE los tuvo en su posesión antes de lo que manifestó; y por ello, era necesario que CFE exhibiese dichos correos en formato “.msg”, para poder constatar que constituyen las versiones íntegras y finales del Reporte, así como la fecha en que los correos fueron enviados.*

108. El Tribunal Arbitral deliberó sobre los planteamientos formulados por la Demandante conforme a la comunicación citada en el párrafo anterior y, mediante correo electrónico de fecha 13 de noviembre de 2021, denegó la petición de la Demandante tomando en cuenta en sus consideraciones que:
- a. desde el punto de vista informático dicha petición carece de sustancia, toda vez que algunas de las inquietudes que señala la Demandante se refieren a la fecha de creación del documento solicitado para conservarlo en formato “.pdf.”, que se “crea” en esa fecha, mas el archivo puede ser modificado posteriormente para incluir algún título, u otro tema, y se modifica su fecha, como sucede igualmente con cualquier documento “M/Word”; y en la especie, el Tribunal Arbitral no encontró elementos indicativos de que pudiera haber existido alguna alteración por parte de CFE, ni la Demandante aportó prueba alguna para suponerla o presumirla; y,
 - b. en todo caso, los argumentos de la Demandante resultaban tardíos a la luz del Artículo 32.1 del Reglamento, teniendo en cuenta que, pudiendo haber formulado de inmediato su objeción y petición consecuente, fue hasta ese momento procesal que la Demandante arguyó y presentó elementos de una posible alteración, que el Tribunal Arbitral no encontró sustentada.
109. El Tribunal Arbitral no recibió objeción alguna en relación con lo resuelto mediante la Orden Procesal No. 7, a que se refiere esta sección, y tampoco en relación con cualquier cuestión que pudiera haber sido considerada como pendiente, a la luz de las resoluciones dictadas conforme a la Orden Procesal No. 6, que precedió a la Orden Procesal No.7 y constituye un antecedente de esta última.

Orden Procesal No. 8

110. Mediante correo electrónico de fecha 28 de octubre de 2021, la Demandante informó al Tribunal Arbitral que, de común acuerdo, las Partes habían decidido aplazar la fecha de entrega de los Memoriales Pre-Audiencia por un tiempo igual al transcurrido desde la emisión de la Orden Procesal No. 6, modificando en consecuencia los siguientes hitos procesales en los términos señalados en dicho correo. La Demandada confirmó el consenso referido por la Demandante, mediante correo electrónico de fecha 29 de octubre de 2021.
111. El Tribunal Arbitral dio respuesta a las Partes mediante correo electrónico de fecha 1 de noviembre de 2021, comunicándoles su conformidad con la modificación planteada respecto de los primeros dos hitos procesales y proponiéndoles, por cuestiones de disponibilidad resultantes de compromisos previos, fechas alternativas para la celebración de los dos hitos restantes, consistentes en la videoconferencia pre-audiencia y de la audiencia.

112. Después de un intercambio de comunicaciones entre las Partes y el Tribunal Arbitral, este último emitió la Orden Procesal No. 8 de fecha 12 de noviembre de 2021, enviada a las Partes en la misma fecha, que contiene el Calendario Procesal modificado por consenso, sin perjuicio de la posibilidad de ser modificado por el Tribunal Arbitral y, además, estableció que las disposiciones contenidas en la Orden Procesal No. 1 y en la Orden Procesal No. 4, seguirían vigentes en sus términos en tanto no contradijesen lo resuelto en la Orden Procesal No. 8.

Memoriales Adicionales Pre-Audiencia

Las Partes presentaron sus respectivos Memoriales oportunamente el mismo día, de manera materialmente simultánea. El contenido y términos de dichos Memoriales, se comentan más adelante al realizar el análisis del fondo del caso.

113. La Demandante presentó el Memorial Pre-Audiencia Empalme adjuntándolo en versión .pdf a su correo electrónico de fecha 29 de noviembre de 2021, transmitido a las 23:42 horas, en el que informó que los dictámenes pericial y declaración testimonial, con sus respectivos anexos, fueron subidos al espacio compartido en la misma carpeta a la que se subieron los documentos correspondientes al Memorial de Demanda, cuyo título fue cambiado a “LCIA 204661 | Documentos Anexos Memoriales de Empalme”. En dicho correo, la Demandante proporcionó el enlace necesario para acceder a la carpeta referida. Mediante un segundo correo electrónico de la misma fecha, la Demandante envió el mismo Memorial al Tribunal Arbitral, en versión M/Word.
114. La Demandada presentó el Memorial Pre-Audiencia CFE adjuntándolo en versión .pdf a su correo electrónico de fecha 29 de noviembre de 2021, transmitido a las 23:35 horas, en el que proporcionó el enlace de acceso a una carpeta compartida con los anexos referidos en su Contestación a la Demanda. Respecto a dicha carpeta, la Demandada informó que la plataforma utilizada para compartir la información (Microsoft – OneDrive) asignó por defecto una fecha de expiración para la accesibilidad de la carpeta a terceros, en este caso el 27 de febrero de 2022, y posteriormente podría ser necesario renovar el enlace, por lo que sería aconsejable la descarga de la información producida.

Objeción de Demandada al Memorial Pre-Audiencia de Empalme

115. Mediante escrito de fecha 10 de diciembre de 2021, que adjuntó a correo electrónico de la misma fecha, la Demandada formuló objeciones en relación con el Memorial Pre-Audiencia Empalme presentado por la Demandante. Las objeciones de la Demandada consistieron en: (i) la supuesta introducción de argumentaciones novedosas dentro del Memorial citado; (ii) la presentación de pruebas periciales en idioma inglés, sin acompañar la traducción al español de las mismas; y, (iii) la supuesta contravención de la limitación en la extensión de dicho Memorial, mediante el abuso de las características del procesador de textos utilizado.

116. La Demandante solicitó de inmediato el mismo día, por la misma vía, se le diese vista para formular manifestaciones a más tardar el 15 de diciembre de 2021 en relación con las objeciones de su contraria. El Tribunal Arbitral concedió a la Demandante lo solicitado, mediante correo electrónico del mismo 10 de diciembre de 2021.
117. La Demandante formuló oportunamente sus manifestaciones mediante correo electrónico de fecha 15 de diciembre de 2021, al que adjuntó escrito de la misma fecha, para controvertir las objeciones de la Demandada. En dicho correo, la Demandante proporcionó el enlace de Dropbox para el acceso a los anexos a dicho escrito y, además, tanto en dicho correo como en el escrito de que se trata plantea la posibilidad de que el Tribunal Arbitral, de considerarlo necesario, citase a las partes para discutir sus respectivos puntos de vista mediante conferencia telefónica o videoconferencia.
118. El Tribunal Arbitral tomó en consideración lo manifestado por las Partes en sus respectivas promociones y, después de deliberar sobre las mismas, mediante correo electrónico de fecha 20 de diciembre de 2021 resolvió sobre las cuestiones planteadas por las Partes, en los términos que a continuación se señalan.
- a. además de considerar que ambas Partes habían tenido [hasta ese punto del procedimiento] suficiente oportunidad para presentar sus respectivos puntos de vista sobre las cuestiones de que se trata, el Tribunal Arbitral se consideró suficientemente informado al respecto y, por tanto, desechó la solicitud de la Demandante de llevar a cabo una conferencia para expresar un alegato oral sobre lo ya expresado por escrito en relación con las cuestiones de que se trata;
 - b. el Tribunal Arbitral aceptó el Memorial Pre-Audiencia de Empalme con las pruebas que lo integran, según fue presentado por la Demandante, sujeto a lo indicado en el siguiente párrafo;
 - c. las Partes no tendrían oportunidad de presentar nuevos escritos antes de la Audiencia, pero el Tribunal Arbitral tomaría en cuenta las manifestaciones que en su caso formularan las Partes, en la Audiencia o posteriormente en su respectivo Memorial de Cierre, en relación con el conjunto de argumentaciones presentadas durante el procedimiento de arbitraje;
 - d. respecto a la falta de presentación por la Demandante, de una traducción al español de los dictámenes periciales exhibidos con el Memorial Pre-Audiencia CFE, el Tribunal Arbitral tomó en cuenta lo manifestado por la Demandante, pero decidió proceder conforme a lo establecido expresamente en el párrafo 19 de la Orden Procesal No. 1 y, en consecuencia, resolvió que la Demandante debería presentar las traducciones al español de dichos dictámenes periciales, fijándole plazo para ello, en la inteligencia de que no sería necesario acompañar la traducción al español de los anexos a dichos dictámenes; y
 - e. finalmente, respecto a la contravención imputada por CFE a la Demandante, en relación con la extensión de su Memorial Pre-Audiencia Empalme mediante el

abuso de las características del procesador de textos utilizado por la Demandante, el Tribunal Arbitral consideró improcedente la objeción de la Demandada, considerando que, si bien tanto en la Orden Procesal No. 1⁴⁵ como en la Orden Procesal No. 4⁴⁶, no se señalaron *criterios editoriales* en relación con el tamaño de la tipografía a utilizar en dichos memoriales, el supuesto *abuso* que se imputa a la Demandante, además de intrascendente, resultaría inocuo al no causar perjuicio alguno a la Demandada ni alterar el equilibrio procesal, en virtud de que el número de páginas excedido, en todo caso, fue muy menor.

119. El Tribunal Arbitral no recibió objeción alguna en relación con lo resuelto mediante la Decisión a que se refiere esta sección. Por otra parte, en cumplimiento de lo resuelto en la misma por el Tribunal Arbitral en los términos del inciso (d) del párrafo anterior, la Demandante hizo entrega de traducciones al español de los dictámenes periciales exhibidos con el Memorial Pre-Audiencia Empalme, adjuntándolas a correo electrónico de fecha 6 de enero de 2022.

Contrainterrogatorio a Testigos y Peritos

120. Mediante sendas comunicaciones de correo electrónico enviadas oportunamente el 6 de diciembre de 2021, las Partes proporcionaron sus respectivas listas con los nombres de los testigos y peritos de su contraria que pretenderían contrainterrogar durante la Audiencia, sin que fueran formuladas manifestaciones al respecto por cualquiera de las Partes.

Videoconferencia Pre-Audiencia

121. Después de un intercambio de comunicaciones entre las Partes y el Tribunal Arbitral, se acordó que la videoconferencia Pre-Audiencia se llevaría a cabo el 6 de enero de 2022. El 5 de enero de 2022, a primera hora, el Tribunal Arbitral envió a cada uno de los representantes de las Partes, mediante la propia plataforma y mediante correo electrónico, la invitación e información necesarias para acceder a la plataforma Zoom que conforme a la práctica seguida en este arbitraje sería utilizada para llevar a cabo la videoconferencia.
122. En respuesta al correo electrónico recibido del Tribunal Arbitral con la invitación referida, la Demandada informó mediante correo electrónico de la misma fecha que:
- a. la Comisión Federal de Electricidad estableció, de manera formal y obligatoria que, con el objetivo de proteger la información confidencial que se transmite y comunica en las videoconferencias, Microsoft *Teams* sería la única plataforma que se podría utilizar para celebrar cualquier tipo de videoconferencias;
 - b. en virtud de que las normativas internas anteriores resultan en una limitante institucional, la Demandada solicitaba que la videoconferencia del jueves 6 de

⁴⁵ Orden Procesal No. 1, apartado X, ¶¶ 10 y 11.

⁴⁶ Orden Procesal No. 4, punto 4.

enero de 2022, así como cualquier otra que se llevase a cabo en el arbitraje, se realizase a través de la plataforma Microsoft *Teams*; y,

- c. en caso de que el Tribunal Arbitral así lo requiriese, CFE estaría en la mejor disposición de organizar y preparar la videoconferencia por la plataforma virtual autorizada.

- 123. El Tribunal Arbitral deliberó en relación con lo anterior y, en aras de no entorpecer la celebración de la videoconferencia en la fecha y hora acordadas ni el procedimiento mismo, mediante correo electrónico de fecha 5 de enero de 2022 aceptó, para esa ocasión, el ofrecimiento de CFE de organizar y preparar la videoconferencia referida por la plataforma virtual que tiene autorizada, a condición de que la fecha y hora de la misma no sufriesen modificación y se enviase a la brevedad la invitación respectiva a quienes debiesen estar en posibilidad de enlazarse a la videoconferencia, conforme a la invitación original enviada previamente por el Tribunal Arbitral.
- 124. Además de no haber surgido objeción o manifestación alguna por parte de la Demandante en relación con lo anterior y de conformidad con lo indicado por el Tribunal Arbitral en su comunicación arriba citada, la Demandada tomó las medidas necesarias y el 5 de enero de 2022 envió mediante la plataforma Microsoft *Teams* la invitación respectiva a quienes debiesen estar en posibilidad de enlazarse a la videoconferencia, proporcionando acto seguido mediante correo electrónico de la misma fecha, el enlace mediante el cual sería posible ingresar a la sala virtual disponible en dicha plataforma, para participar en la videoconferencia.
- 125. La videoconferencia referida se llevó a cabo sin contratiempos el 6 de enero de 2022 a partir de las 11:00 A.M., mediante la plataforma Microsoft *Teams*, con la participación de los representantes de las Partes que cada una de ellas designó para tal efecto, así como de los tres integrantes del Tribunal Arbitral. En dicha videoconferencia se discutieron las cuestiones pendientes en relación con la Audiencia, se definieron los diversos detalles necesarios para su organización y la logística a seguir durante de la Audiencia, y se acordaron las cuestiones pertinentes a fin de plasmar todo ello en la orden procesal que sería emitida para tal efecto.

Orden Procesal No. 9

- 126. El Tribunal Arbitral emitió la Orden Procesal No. 9 de fecha 10 de enero de 2022, notificada mediante correo electrónico de la misma fecha. Para la emisión de este documento, el Tribunal Arbitral tomó en consideración tanto las manifestaciones formuladas por las Partes con anterioridad a la videoconferencia arriba citada como durante el desarrollo de la misma y, en particular, se privilegiaron los acuerdos alcanzados en relación con la organización y celebración de la Audiencia.
- 127. Las disposiciones contenidas en esta Orden Procesal, resultado de lo referido en el párrafo anterior, consistieron en resumen en las siguientes:

- a. la Audiencia se celebraría los días 15 a 18 de febrero de 2022, conforme al horario y orden establecidos en la Orden Procesal, y se llevaría a cabo en formato virtual o remoto, mediante la plataforma Microsoft *Teams*;
- b. habida cuenta de que el Tribunal Arbitral mantendría en todo tiempo el control sobre la Audiencia, las Partes designarían un administrador, que sería responsable de organizar la plataforma para el desarrollo de la Audiencia y cuyas responsabilidades y tareas quedaron precisadas en detalle en la Orden Procesal, en la que se dispuso, asimismo, que las Partes deberían cubrir por partes iguales, y pagar directamente, los costos de la Audiencia;
- c. se contaría con servicio de transcripción o grabación de audio y/o video, que sería responsabilidad de las Partes, que decidirían sobre el instrumento a utilizar para tal efecto, y se incluyeron disposiciones en relación con la entrega posterior de la transcripción o grabación correspondiente;
- d. en relación con los alegatos de apertura y de cierre, se indicaron los tiempos disponibles para los mismos, indicando expresamente que las Partes deberían ceñirse en forma estricta a los planteamientos realizados en sus Memoriales y pruebas presentados, pudiendo asistirse mediante presentaciones electrónicas y documentos demostrativos, siempre y cuando los mismos no contuviesen nueva prueba;
- e. en relación con el interrogatorio de testigos y peritos, se especificaron los nombres de quienes habiendo sido llamados por la Parte contraria a la oferente deberían comparecer para tal efecto, así como el orden a seguir para su intervención, el tiempo disponible para las Partes y otras cuestiones;
- f. considerando las posiciones discrepantes manifestadas por las Partes, el Tribunal Arbitral resolvió que la Demandada podría auxiliarse y utilizar durante la Audiencia traducción simultánea, única y exclusivamente en el caso de aquellos peritos que desahogasen sus interrogatorios en idioma inglés, y los costos de la traducción serían a costa de la Demandada, por ser de su interés; y,
- g. Salvo autorización previa del Tribunal Arbitral, las Partes no podrían presentar en sus Memoriales de Conclusiones nueva prueba ni variar su argumentación o pretensiones; y antes del cierre de la Audiencia, el Tribunal Arbitral y las Partes definirían las reglas para la presentación de dichos Memoriales y de sus Declaraciones de Costos.

128. El mismo 10 de enero de 2022 la Demandante manifestó mediante correo electrónico que, en virtud de que en la Orden Procesal No. 9 *se tomaron ciertas decisiones sobre cuestiones que no fueron atendidas en la videoconferencia pre-audiencia arriba citada, tales como la plataforma en la que se celebraría la Audiencia, así como detalles del orden y tiempos de*

intervenciones, solicitaba que se celebrase la continuación de la conferencia pre-audiencia para abordar esos puntos. La Demandante insistió sobre su solicitud anterior, mediante correo electrónico de 11 de enero de 2022, ante la inmensidad de temas administrativos, organizacionales y de coordinación pendientes para la Audiencia.

129. El Tribunal Arbitral deliberó sobre la manifestado por la Demandante en su solicitud arriba citada y, considerando razones de eficiencia y con el objetivo de aclarar cuestiones pendientes y lograr conclusiones viables, mediante correo electrónico de fecha 11 de enero de 2022 instó a las Partes a procurar acuerdos respecto de los temas administrativos, organizacionales y de coordinación pendientes, y planteasen al Tribunal Arbitral a más tardar el 17 de enero de 2022 los puntos en que no hubieren logrado un acuerdo, en su caso, para discutirlos en una nueva videoconferencia el 19 de enero de 2022, vía Microsoft *Teams*, para cuya realización solicitaría la colaboración técnica de la Demandada en caso de ser necesaria.
130. La Demandante informó mediante correo electrónico el 17 de enero de 2022 que, si bien las Partes habían *expresado apertura para conciliar algunos puntos*, que no especificó, *existían otros pendientes de definición, en los que las Partes tenían posturas distintas*, por lo cual la Demandante proporcionó una lista, con comentarios breves, de los temas que solicitaba fuesen abordados en la videoconferencia. La Demandada formuló mediante correo de la misma fecha manifestaciones semejantes a las de su contraparte y proporcionó una lista de temas para discusión en la videoconferencia, con la postura de la Demandada al respecto.

Segunda videoconferencia Pre-Audiencia

131. En virtud de haber surgido circunstancias fuera del control del Tribunal Arbitral, por las que este no podría generar oportunamente la invitación para celebrar dicha videoconferencia mediante la plataforma Microsoft *Teams* en la fecha establecida, lo comunicó a las Partes mediante correo electrónico de fecha 14 de enero de 2022, en el que además solicitó el apoyo técnico de la Demandada para tal efecto.
132. La Demandada expresó de inmediato su anuencia, por la misma vía. Asimismo, la Demandante quedó enterada el mismo día según indicó mediante correo electrónico de la misma fecha, sin formular objeción. La Demandada generó y transmitió el 18 de enero de 2022 mediante la plataforma Microsoft *Teams* las invitaciones individuales necesarias para participar en la videoconferencia, y además proporcionó, mediante correo electrónico de la misma fecha, el enlace mediante el cual sería posible ingresar a la videoconferencia.
133. La segunda videoconferencia referida se llevó a cabo sin contratiempos el 19 de enero de 2022 a partir de las 11:00 A.M., mediante la plataforma Microsoft *Teams*, con la participación de los representantes de las Partes que cada una de ellas designó para tal efecto, así como de los tres integrantes del Tribunal Arbitral. En dicha videoconferencia se discutieron las cuestiones

pendientes en relación con la Audiencia conforme a los planteamientos formulados por las Partes en sus comunicaciones de fecha 17 de enero de 2022. En la videoconferencia, las Partes alcanzaron algunos acuerdos y expresaron su compromiso de continuar la discusión de las cuestiones pendientes.

Actuaciones posteriores a la segunda videoconferencia Pre-Audiencia

134. Mediante comunicaciones de correo electrónico de fecha 21 de enero de 2022, las Partes plantearon al Tribunal Arbitral sus posturas individuales respecto a las cuestiones en que seguía existiendo divergencia, así como otras pendientes de definición por estar la Demandada en espera de recibir respuesta a las consultas formuladas internamente. En vista de la cercanía de la Audiencia, mediante comunicación de correo electrónico enviada al finalizar el 24 de enero de 2021, el Tribunal Arbitral invitó a las Partes a hacer sus mejores esfuerzos para lograr acuerdos a la brevedad sobre las cuestiones pendientes, y comunicarle tanto esos acuerdos como las cuestiones finales que no hubiesen sido objeto de consenso.
135. Ambas Partes dieron respuesta a la invitación del Tribunal Arbitral mediante sendos correos electrónicos enviados al cierre del 26 de enero de 2022. La Demandante, además de presentar cierta información formuló manifestaciones, algunas de ellas discrepando de su contraparte, solicitando *que se tuviese por cerrado el período de pláticas entre las Partes y el Tribunal Arbitral decidiese lo conducente*. La Demandada, por su parte, además de presentar información formuló diversas manifestaciones, principalmente en relación con el desahogo de la Audiencia, discrepando de su contraparte respecto a algunos puntos y cuestionando, sin formular alguna objeción específica, algunas cuestiones derivadas de resoluciones procesales anteriores.
136. La Demandante, mediante correo electrónico enviado el viernes 28 de enero de 2022, informó la ubicación que tendrían sus testigos y peritos durante la Audiencia, sin hacer referencia a las manifestaciones formuladas por la Demandada en su comunicación del 26 de enero de 2022. La Demandada, en la misma fecha y por la misma vía, informó posteriormente de manera genérica la ubicación que tendrían sus testigos y peritos durante la Audiencia, por las razones que explicó, manifestando al respecto que la ubicación exacta de cada uno de ellos sería comunicada posteriormente. La Demandada tampoco hizo referencia a las manifestaciones formuladas por la Demandante en su comunicación del 26 de enero de 2022. La Demandante envió un correo electrónico al Tribunal Arbitral el lunes 31 de enero de 2022, para preguntar a este si tenía una fecha aproximada en la que emitiría su resolución respecto a la organización de la Audiencia.

Orden Procesal No. 10

137. Tomando en cuenta las manifestaciones de las Partes a que antes se hizo referencia, y privilegiando los acuerdos logrados por ellas sobre la organización y logística de la Audiencia, el Tribunal Arbitral resolvió lo conducente en relación con las cuestiones pendientes respecto a la organización de la Audiencia, mediante la Orden Procesal No. 10 de fecha 31 de enero de 2022, notificada a las Partes mediante correo electrónico de la misma fecha. Los puntos principales de dicha Orden se resumen a continuación.

- a. se definieron la fecha de inicio de la Audiencia y su duración, la fecha en que cada Partes debería enviar la lista de las personas que podrían estar presentes y participar en la Audiencia, así como la advertencia de que ninguna persona ajena a la lista respectiva podría estar presente en la Audiencia y no sería admitida por el Administrador de ésta;
- b. se confirmó que por acuerdo de las Partes la Audiencia se llevaría a cabo en formato virtual, utilizando la plataforma Microsoft *Teams*;
- c. se resolvió que, a propuesta de la Demandante respecto a la cual la Demandada no formuló contrapropuesta u objeción alguna, la Audiencia sería administrada por la Corte Internacional de Arbitraje de la Cámara de Comercio Internacional (“CCI”), que fungiría como Administrador de la Audiencia y cuyos honorarios serían pagados por cada una de las Partes en un 50%, incluyendo las disposiciones pertinentes en relación con la mecánica para dicho pago;
- d. se estableció la Agenda de la Audiencia, disponiéndose que las Partes enviarían a su contraria y al Tribunal Arbitral sus alegatos de apertura con 15 minutos de antelación, además de confirmar que, por acuerdo de las Partes, éstas no formularían alegatos orales de clausura en la Audiencia;
- e. asimismo, se confirmó que por acuerdo de las Partes ninguna etapa procesal de la Audiencia estaría sujeta a límite de tiempo, pero cada Parte dispondría de un total de 12 horas para realizar la presentación de sus alegatos de apertura y sus contrainterrogatorios, sin perjuicio de que, en aras de dar a cada una de las Partes una oportunidad razonable de hacer valer sus derechos, el Tribunal Arbitral podría resolver en la Audiencia, a petición de la interesada y de considerar a la luz de las circunstancias que existe causa justificada, una ampliación que considerase razonable del tiempo asignado a cualquiera de las Partes;
- f. en virtud de existir discrepancia entre las Partes, el Tribunal Arbitral resolvió que quienes habiendo sido ofrecidos como testigos, tuviesen un cargo de alta dirección dentro de la organización, con responsabilidad de gestión sobre la entidad, podrían estar presentes en la Audiencia durante la presentación de los alegatos de apertura de las Partes; y por esta razón, podría estar presente en esa fase de la Audiencia el apoderado y representante de la Demandante, quien no podría regresar antes de haber declarado como testigo, mientras que la Demandada no acreditó a algún testigo suyo que estuviera en esa situación;

- g. se fijó una fecha límite para que las Partes informasen la ubicación exacta de sus testigos y peritos durante la Audiencia y, por acuerdo de las Partes, en el interrogatorio de testigos y peritos podrían estar presentes representantes de la contraparte, a su propia costa;
- h. se definieron diversas reglas para la presentación de testigos y peritos, en relación con el tiempo disponible para realizar las presentaciones de los peritos, la forma de conducir los contrainterrogatorios y el orden de presentación de los testigos y de los peritos, así como el requisito, acordado por las Partes, de enviar a la contraparte y a los miembros del Tribunal Arbitral, 15 minutos antes de proceder al contrainterrogatorio respectivo, un ejemplar de las carpetas de interrogatorio, que no podrían contener documento alguno que no hubiese estado plenamente identificado e incluido en el expediente;
- i. se resolvió así mismo que, conforme a lo planteado por la Demandante y no objetado por la Demandada, quien formulase el contrainterrogatorio podría utilizar documentos adicionales a los contenidos en la carpeta, de considerarlo pertinente a la luz de las respuestas del testigo, a condición de que el documento formase parte del expediente y se hiciese referencia a su número de identificación en el mismo;
- j. de conformidad con la Orden Procesal No. 1, no sería necesaria interpretación de los testigos y peritos que fuesen examinados en idioma inglés, pero la Demandada podría auxiliarse y utilizar traducción simultánea durante la Audiencia, únicamente tratándose de esos peritos y testigos, a costa de la Demandada por ser de su propio interés; y,
- k. en virtud de que a la fecha de la Orden Procesal cada una de las Partes había enviado a la otra la cotización propuesta de una empresa que podría ser contratada para prestar el servicio de estenografía durante la Audiencia, sin que el Tribunal Arbitral tuviese conocimiento de dichas cotizaciones, el Tribunal decidió que, salvo que las Partes acordasen algo diferente al respecto, resolvería lo conducente a más tardar el viernes 4 de febrero de 2022; para lo cual, pidió a las Partes que le proporcionasen copia de las cotizaciones citadas.

138. Mediante correo electrónico de fecha 3 de febrero de 2022, la Demandante (i) informó que las Partes habían acordado la contratación de la empresa SEC para prestar los servicios de estenografía, adjuntando copia de la confirmación de ésta; (ii) informó sobre el estado de la contratación de la CCI para fungir como Administrador de la Audiencia; y (iii) informó haber enviado el día anterior a su contraria, para proponerle opciones respecto al orden de presentación de los testigos y peritos en la Audiencia.

139. La Demandada formuló manifestaciones el mismo día y por la misma vía respecto a lo manifestado por la Demandante en el correo antes citado; conforme a las cuales (i) confirmó lo acordado en relación con los servicios de estenografía; (ii) informó sobre el estado del proceso, dentro de las áreas administrativas de CFE, para la contratación del Centro de Audiencias de la CCI; y (iii) expuso su desacuerdo con las propuestas recibidas de la

Demandante para el desahogo de la Audiencia, e informó haber enviado a su contraria una contrapropuesta al respecto.

140. La Demandante comunicó al Tribunal Arbitral mediante correo electrónico de fecha 4 de febrero de 2022 el acuerdo de las Partes en relación con la secuencia a seguir para el desahogo de la Audiencia, formulando diversos comentarios al respecto, independientemente de dicho acuerdo. Asimismo, la Demandante expresó que, si bien conforme a la Orden Procesal No. 9 debería celebrarse el 8 de febrero de 2022 una prueba de funcionamiento de la plataforma que se utilizaría para la Audiencia, la CCI, Administrador de la Audiencia, le informó que la prueba podría realizarse el viernes 11 de febrero de 2022; para lo cual, sería importante conocer el servicio de traducción simultánea que CFE utilizaría en la Audiencia.
141. Mediante correo electrónico de fecha 5 de febrero de 2022, la Demandada manifestó que remitiría posteriormente una comunicación en la que confirmaría los puntos conciliados entre las Partes y detallaría los que representaban desacuerdos, y asimismo daría contestación a las manifestaciones de la Demandante sobre la equidad en el procedimiento, con motivo del orden propuesto para el desahogo de la Audiencia. La Demandada lo hizo mediante correo electrónico de fecha 8 de febrero de 2022, *en seguimiento a la comunicación de la Demandante del 4 de febrero de 2022*.
142. En su correo electrónico de fecha 8 de febrero de 2022, la Demandada (i) confirmó que *el orden de las actuaciones expresadas en la propuesta* [se infiere que de la Demandante] *es el acordado por las Partes*; (ii) *se advierte que la Demandante ha aprovechado* [se infiere que en la comunicación de ésta del 4 de febrero de 2022] *para realizar algunas manifestaciones sobre puntos que han formado parte de los intercambios entre las Partes y otras argumentaciones que resultan novedosas para CFE*; sobre las cuales, *la Demandada transmite sus posicionamientos*, en los cuales, la Demandada controvierte extensamente lo manifestado por la Demandante en la comunicación citada; y (iii) sin señalar hora, solicitó que la prueba de funcionamiento fuese realizada el 11 de febrero de 2022, para que pudieran participar los testigos, peritos y traductores de CFE, desde las respectivas ubicaciones y equipos que pretenderían utilizar en la Audiencia.
143. El Tribunal Arbitral informó a las Partes, mediante correo electrónico de 8 de febrero de 2022 que, en vista de que las Partes y la CCI estaban planteando la posibilidad de tener la conferencia de prueba el 11 de febrero de 2022, contaría con disponibilidad entre las 12:00 horas y las 15:00 horas, tiempo de la Ciudad de México, para participar en dicha prueba. La Demandante, mediante correo electrónico de la misma fecha, solicitó que la prueba fuese a las 12:00 horas *para que las personas que estaban en otro huso horario pudiesen conectarse*. La Demandada, por su parte, manifestó mediante correo electrónico del mismo día su

conformidad con que la conferencia de prueba fuese llevada a cabo el 11 de febrero de 2022 a las 12:00 horas de la Ciudad de México.

144. Mediante nuevo correo electrónico de fecha 8 de febrero de 2022, la Demandante se refirió al correo de la Demandada de esa misma fecha y, al respecto, controvirtió su argumento de que *la admisión de los informes periciales presentados por EMPALME en su Memorial Pre-Audiencia violentó su derecho de contradicción*; reiteró lo manifestado en su correo de fecha 4 de febrero de 2022, en relación con la utilización del *chess clock* y los tiempos de intervención en la Audiencia; manifestó su preferencia de horario para realizar la prueba de funcionamiento, añadiendo que la Demandada debería informar si emplearía traducción simultánea o sucesiva en la Audiencia, para determinar si se podría utilizar la plataforma Microsoft *Teams*; y, debería informar si ya había realizado los pagos correspondientes a la CCI y al proveedor de servicios de estenografía. La Demandada informó que utilizaría traducción simultánea y lo confirmó posteriormente⁴⁷.
145. La Demandante, mediante correo electrónico de fecha 9 de febrero de 2022, comunicó la ubicación de sus testigos y peritos, así como los nombres de quienes estarían presentes en el contrainterrogatorio a los testigos y peritos de CFE; informó la confirmación de la fecha y hora para realizar la prueba de funcionamiento; proporcionó el formato recibido de la CCI, para que las Partes le enviaran la información ahí especificada sobre quienes estarían presentes en la Audiencia, para hacer posible su ingreso; y, además, se refirió al pago de los servicios de administración de la Audiencia y estenografía.
146. La Demandante dio seguimiento a lo anterior mediante correo electrónico de fecha 10 de febrero de 2022, en el que informó que, *ante el silencio de CFE respecto a los pagos pendientes a la CCI y al estenógrafo, con tal de no poner en riesgo la Audiencia la Demandante realizaría dichos pagos al día siguiente y cubriría por el momento los montos correspondientes a CFE*. Además, señaló el incumplimiento de la Demandada con el plazo fijado en la Orden Procesal No. 10 para informar la ubicación de sus testigos y peritos, y solicitó al Tribunal Arbitral que la instruyese a enviar dicha información a fin de estar en posibilidad de ejercer el derecho de tener representantes presentes en el contrainterrogatorio; y, finalmente, informó que ya había enviado a la CCI el documento solicitado para la realización de la prueba de funcionamiento. En la misma fecha, el Tribunal Arbitral invitó a la Demandada mediante correo electrónico a enviar a la brevedad dicha información.
147. La Demandada atendió el mismo día –mediante correo electrónico– lo solicitado por el Tribunal Arbitral, informando la ubicación de sus testigos y peritos, así como la decisión de la Demandada de no enviar a personal de CFE a presenciar los contrainterrogatorios de los

⁴⁷ Correo electrónico de la Demandada, de fecha 13 de febrero de 2022.

testigos y peritos de Empalme. La Demandada adjuntó a esta comunicación la lista de participantes en la Audiencia a que se refirió en su correo, informando haber enviado a la CCI una lista consolidada de asistentes. Asimismo, informó que ya había efectuado el pago correspondiente a la CCI, y estaba en contacto con el prestador de los servicios de estenografía para acordar los detalles de su pago conforme al procedimiento interno de CFE, por lo que su presencia en la Audiencia no estaba afectada.

148. El Administrador de la Audiencia envió a los participantes en la Audiencia registrados, tanto la invitación para ingresar a la prueba de funcionamiento, como un enlace que estaría vigente para todos los días de la Audiencia.
149. El 11 de febrero de 2022 se llevó a cabo una videoconferencia breve, bajo la coordinación del Administrador de la Audiencia, en la que participaron algunas de las personas que ingresarían a la Audiencia como representantes de las Partes, peritos, testigos o personas con otras funciones, así como los tres integrantes del Tribunal Arbitral, para realizar la prueba de funcionamiento de la plataforma que se utilizaría para la Audiencia. Al final de la prueba, se acordó que, de así requerirse por el Administrador de la Audiencia, coordinaría, antes de iniciar la Audiencia, una breve prueba de funcionamiento.
150. Toda vez que en la prueba de funcionamiento se comprobó que por limitaciones técnicas inherentes a la plataforma Microsoft *Teams*, esta no podría ser viable para celebrar la Audiencia por ese medio en virtud de carecer de las funciones necesarias para utilizarla con el servicio de traducción simultánea, previa verificación con el Administrador de la Audiencia respecto a la posibilidad de cambiar de plataforma, la Demandada obtuvo la autorización interna necesaria y se acordó que la Audiencia sería celebrada utilizando la plataforma Zoom y así procedió el Administrador de la Audiencia en consecuencia.
151. Las Partes realizaron un intercambio de comunicaciones mediante correo electrónico a lo largo del día el 13 de febrero de 2022, acordando que la transcripción de la Audiencia constase en español, incluyendo el examen de los testigos y peritos que comparecerían en otro idioma, sujeto a la condición de que la grabación oficial de la Audiencia reflejase el idioma original en que se desahogasen las actuaciones, sin que se superpusiese la traducción simultánea.

Audiencia

152. La Audiencia se celebró de manera virtual, mediante plataforma Zoom, durante los días 14, 15, 16 y 17 de febrero de 2022, y se desahogó de conformidad con lo establecido en la Orden Procesal No. 10 y en disposiciones complementarias de esta última. Como parte del análisis del Tribunal Arbitral a la luz de los memoriales, comunicaciones y documentos que constituyen el expediente del caso, así como de lo manifestado por las Partes durante todo el

proceso de instrucción de la causa, se hace referencia en este laudo a cuestiones, de cualquier naturaleza, surgidas durante la Audiencia y relevantes para efectos de dicho análisis.

153. Consecuentemente, en este capítulo se mencionan en detalle algunas cuestiones que, sin estar referidas estrictamente a cuestiones de fondo relativas a la litis, sino a la instrucción de la causa y al desahogo de la Audiencia, el Tribunal Arbitral considera relevantes y se mencionan párrafos adelante. Otras cuestiones relevantes debatidas en la Audiencia, relativas al fondo de la litis y extraídas de la transcripción de la Audiencia, se resumen adelante en un capítulo destinado a ese fin.
154. Al concluir el desahogo de las cuestiones objeto de la Audiencia, el Tribunal Arbitral preguntó a los representantes de las Partes cuándo esperarían contar con la transcripción de la Audiencia y el tiempo que requerirían para revisarla, discutirla y acordar el texto final de la transcripción. El señor Roberto Tirado, encargado del registro y transcripción de la Audiencia y presente en ésta, manifestó que entregaría la Transcripción a los representantes de las Partes, para su revisión, el 23 de febrero de 2022.
155. El tiempo requerido para la revisión de la Transcripción, su discusión por las Partes y la liberación del texto final de la Transcripción, fueron objeto de discusión, por lo que en virtud de la distancia entre los puntos de vista de las Partes se acordó que estas cuestiones serían decididas posteriormente por el Tribunal Arbitral, tomado en cuenta los planteamientos de ambas Partes. También se acordó que las Partes discutirían la extensión, contenido y criterios editoriales que debieran regir los memoriales de conclusión de las Partes.
156. Al final de la Audiencia, el Presidente preguntó a las Partes si deseaban tratar algún tema adicional antes de concluirla.⁴⁸ El representante de la Demandante señaló que no, y sólo deseaba “... agradecerle a usted y a los demás miembros del tribunal Arbitral su tiempo y el estudio que han dedicado a este tema”.⁴⁹ Sin embargo, el representante de la Demandada manifestó su deseo de hacer algunas manifestaciones.⁵⁰
157. Haciendo referencia a los memoriales pre-Audiencia que las Partes habían acordado serían de presentación simultánea, el representante de la Demandada mencionó que el Memorial Pre-Audiencia presentado por la Demandante “*terminó constituyéndose en una verdadera réplica a la contestación de CFE*”, lo que “*provocó que, bajo el calendario procesal, CFE no tuviera*

⁴⁸ Transcripción LCIA 204661 – 17-02-2022 (4ª. Parte) Final, página 65. Fernando Estavillo-Castro: “..., salvo que alguien tenga algo que decir, que quiera agregar, podríamos despedirnos y agradecerles a todos la participación y la colaboración que han tenido.”

⁴⁹ Transcripción LCIA 204661 – 17-02-2022 (4ª. Parte) Final, página 65. Rodrigo Zamora: “Ningún tema adicional de nuestra parte, señor Presidente, más que agradecerle a usted ya los demás miembros del tribunal Arbitral su tiempo y el estudio que han dedicado a este tema ...”

⁵⁰ Transcripción LCIA 204661 – 17-02-2022 (4ª. Parte) Final, página 65. Antonio Grayeb Cervantes: “Señores árbitros, si nos lo permiten, nos gustaría hacer algunas manifestaciones antes de concluir con la audiencia”.

una oportunidad de rebatir, una oportunidad programada bajo el calendario procesal para rebatir el contenido de estas periciales". Sobre el particular, el representante de la Demandada manifestó que "... *al no tener una oportunidad CFE de rebatir estos dictámenes periciales, consideramos desde la representación de CFE, que fue violentado el debido proceso y la oportunidad de defensa de CFE*", y dicho representante agregó que "*Lo anterior, señores árbitros, consideramos que contraviene particularmente lo establecido por el artículo 14 del Reglamento de Arbitraje, específicamente podría ser el 14.4, donde se otorga al Tribunal Arbitral la facultad para conducir el procedimiento siempre y cuando otorgue a las partes la misma oportunidad de defensa, o una plena oportunidad de defensa*".⁵¹

158. El co-árbitro Siqueiros cuestionó las manifestaciones del representante de la Demandada y señaló entonces que el Tribunal se había esforzado en buscar a lo largo del procedimiento arbitral brindar la misma oportunidad a ambas Partes para presentar su caso: "... *no solamente nos hemos esforzado, sino creo que hemos logrado en permitir que sea un proceso equitativo en el que se ha dado la oportunidad, la misma oportunidad a las dos partes de presentar su posición*". Respecto a la aparente desventaja de que el Memorial Pre-Audiencia Empalme haya constituido prácticamente una réplica al escrito de Contestación a la Demanda, al cual la Demandante aportó pruebas periciales, el co-árbitro Siqueiros recordó que, antes de dictar la Orden Procesal No. 1 el Tribunal Arbitral aceptó la propuesta de ambas Partes de que fueran ellas quienes acordasen las directrices y los términos del Calendario Procesal, y que, antes de

⁵¹ Transcripción LCIA 204661 - 17-02-2022 (4a. Parte) Final, páginas 65-67. Antonio Grayeb Cervantes: "... *como es de conocimiento del Tribunal Arbitral, al momento de la presentación del memorial pre-audiencia de la Demandante, la Comisión se manifestó en su oposición o en el sentido de oponerse a la admisión de los dictámenes periciales que fueron presentados bajo las nomenclaturas AP-002, el AP-003, el AP-004*" "... *conforme fuimos analizando el contenido de estos informes, nos dimos cuenta que al integrarse a este memorial pre-audiencia, en el memorial preaudiencia terminó constituyéndose en una verdadera réplica a la contestación de CFE*"

...
 "Entonces, en este sentido, recordando que los memoriales pre-audiencia fueron planeados para ser presentados de forma simultánea, consideramos que esto provocó que bajo el calendario procesal, CFE no tuviera una oportunidad de rebatir, una oportunidad programada bajo el calendario procesal para rebatir el contenido de estas periciales"

...
 "Señores árbitros, al no tener una oportunidad CFE de rebatir estos dictámenes periciales, consideramos desde la representación de CFE, que fue violentado el debido proceso y la oportunidad de defensa de CFE"

...
 "Lo anterior, señores árbitros, consideramos que contraviene particularmente lo establecido por el artículo 14 del Reglamento de Arbitraje, específicamente podría ser el 14.4, donde se otorga al Tribunal Arbitral la facultad para conducir el procedimiento siempre y cuando otorgue a las partes la misma oportunidad de defensa, o una plena oportunidad de defensa"

...
 "Consideramos que esta era la oportunidad de los colegas y la representación de Empalme para aclarar estas declaraciones y estos puntos que salieron a la luz a partir de la comparecencia de los peritos, lo anterior, señores árbitros, desde nuestra percepción, consideramos que no representa sólo un desapego a la normativa aplicable al arbitraje, sino que representa un desprecio total a la buena fe y a la legalidad en la conducción del procedimiento aplicados por la demandante y sin que, no sobra decirlo, la demandante ha hecho tanta referencia a estos principios de buena fe procesal"

su emisión, solicitó a ambas Partes comentarios. En dicha Orden Procesal se contempló que los Memoriales Pre-Audiencia estuvieran acompañados de pruebas.⁵²

159. Acto seguido, el representante de la Demandada manifestó que reconocía que no acusaba “... de un actuar doloso al Tribunal Arbitral. Al contrario, entendemos que el Tribunal Arbitral ha hecho lo que ha podido con lo que ha tenido en esos momentos de discrepancias entre las partes, agradecemos esos esfuerzos”. Posteriormente indicó “... reitero, no es una acusación al Tribunal Arbitral. Licenciado Siqueiros, me disculpo si esa ha sido la imagen que ha dado o como ha sido recibido el mensaje, pero no es la intención de CFE decir eso”.⁵³

Transcripción de la Audiencia

160. El Tribunal Arbitral solicitó a las Partes mediante correo electrónico de fecha 24 de febrero de 2022, le informasen si habían recibido la transcripción de la Audiencia y si habían acordado el plazo para su revisión conjunta por las Partes y la definición de la versión final de la transcripción. En dicho correo, el Tribunal Arbitral indicó a las Partes que, salvo que hubieran llegado a un acuerdo, después de discutir esta cuestión el Tribunal consideraba que un plazo de 20 días, siguientes a la fecha en que hubiese sido entregada a las Partes la versión preliminar de la Transcripción, sería razonable y suficiente para que las Partes acordasen el

⁵² Transcripción LCIA 204661 - 17-02-2022 (4a. Parte) Final, páginas 69-70. Eduardo Siqueiros: “Hago simplemente un comentario, porque de las referencias que comentaba el licenciado Grayeb, advierto que infirió, si no lo dijo en forma directa, que el Tribunal ha permitido que se haya violentado el derecho de la parte demandada y que no se haya seguido un debido proceso, ni se le haya dado la misma oportunidad para presentar su caso, como lo requiere el reglamento arbitral.”

...

“El Tribunal sometió a las partes y recibió sus comentarios, previo a la emisión de la orden procesal número uno, y la orden procesal número uno contempló que habría memoriales pre-audiencia y que se presentarían y podrían presentar pruebas. Si no las presentó la comisión, fue su derecho; si las presentó al parte demandante, fue su derecho también, pero el que digan que no tuvieron la misma oportunidad me parece realmente inapropiado en este procedimiento”

“... como miembro de este Tribunal tengo derecho a decir que no solamente nos hemos esforzado, sino creo que hemos logrado en permitir que sea un proceso equitativo en el que se ha dado la oportunidad, la misma oportunidad a las dos partes de presentar su posición”.

⁵³ Transcripción LCIA 204661 - 17-02-2022 (4a. Parte) Final, página 70. Antonio Grayeb Cervantes: “Señores árbitros, si me permiten hacer una aclaración sobre este punto, sobre lo que acaba de comentar el licenciado Siqueiros.”

“Lamento, si es que ese fue el mensaje que transmití en mi primera intervención, pero no estamos acusando de un actuar doloso al Tribunal Arbitral. Al contrario, entendemos que el Tribunal Arbitral ha hecho lo que ha podido con lo que ha tenido en esos momentos de discrepancias entre las partes, agradecemos esos esfuerzos.

...

“No ha sido una acusación de un actuar doloso del Tribunal Arbitral, sin embargo, sí resaltamos que nuestros colegas de la demandante eran plenamente conscientes de esta situación.

“Entonces, reitero, no es una acusación al Tribunal Arbitral. Licenciado Siqueiros, me disculpo si esa ha sido la imagen que ha dado o como ha sido recibido el mensaje, pero no es la intención de CFE decir eso.

“Entonces, con esto concluyo mi intervención no sé si haya algún comentario adicional.”

texto final de la misma, cuya entrega, a su vez, determinaría la fecha límite para la presentación de los Memoriales de Cierre de las Partes.

161. La Demandante informó sobre lo anterior mediante correo electrónico del mismo día, manifestando que la versión preliminar de la transcripción debería ser entregada el 25 de febrero de 2022; y, respecto a los Memoriales de Cierre, las Partes acordaron que deberían tener una extensión máxima de 45 cuartillas, incluyendo notas de pie de página y sin incluir portada, índice y lista de anexos, utilizando tipografía de tamaño 12 con interlineado de 1.5 pts y márgenes “normales”; y su contenido debería limitarse a los temas, actuaciones y documentos que fueron materia del procedimiento arbitral y de la Audiencia, y las Partes únicamente podrían hacer referencia a documentos que formen parte del expediente, incluyendo el número de anexo. Asimismo, respecto a costos las Partes acordaron que, en los casos aplicables, los costos deberían estar relacionados con los comprobantes de pago o facturación correspondientes.
162. La Demandada confirmó mediante correo electrónico de fecha 25 de febrero de 2022, los acuerdos señalados por la Demandante sobre los criterios que regirían la presentación de los Memoriales de Cierre. Toda vez que, al informar las Partes sobre sus acuerdos en relación con dichos Memoriales, no informaron la existencia de acuerdo alguno en relación con el plazo para la revisión conjunta de la Transcripción y la definición de la versión final de la Transcripción, el plazo para tal efecto sería el determinado por el Tribunal Arbitral mediante su correo electrónico de fecha 24 de febrero de 2022, arriba citado.
163. La Demandante presentó el 17 de marzo de 2022 las versiones estenográficas de cada uno de los días de Audiencia, que constituyen la Transcripción, adjuntándolas a correo electrónico de esa fecha, en el que además de manifestar que dichos documentos contenían las modificaciones y ajustes acordados por las Partes y por tanto eran las versiones finales de las mismas, solicitó al Tribunal Arbitral que indicase a las Partes la fecha en que vencería el plazo para presentar los Memoriales de Cierre.
164. Mediante correo electrónico de fecha 18 de marzo de 2022 el Tribunal Arbitral pidió a la Demandada que, en caso de tener algo que manifestar en relación con el citado correo de la Demandante de fecha 17 de marzo de 2022, lo hiciera en el transcurso de ese mismo día a fin de estar en posibilidad de resolver sobre lo solicitado por la Demandante en el segundo párrafo de dicho correo. La Demandada respondió el mismo día por la misma vía, confirmando el contenido de los documentos finales de las versiones estenográficas de cada uno de los días de Audiencia, enviadas por la Demandante el 17 de marzo de 2022. En consecuencia, mediante correo electrónico de la misma fecha el Tribunal Arbitral indicó a las Partes que, de conformidad con el Calendario Procesal, la fecha límite para la presentación de los Memoriales de Cierre sería el lunes 2 de mayo de 2022.

Memoriales de Cierre CFE y Empalme

165. Las Partes presentaron en tiempo sus respectivos Memoriales de Cierre, ambos de fecha 2 de mayo de 2022. La Demandante lo hizo mediante correo electrónico de la misma fecha, al que adjuntó dicho el Memorial de Cierre Empalme, manifestando que los anexos correspondientes se identifican con el número A-114 y fueron agregados a la carpeta que ahí mencionó, proporcionando el enlace necesario para acceder a dicha carpeta. La Demandada, por su parte, también lo hizo mediante correo electrónico de la misma fecha, al que adjuntó el Memorial de Cierre CFE.
166. Mediante correo electrónico de fecha 26 de mayo de 2022, el Tribunal Arbitral informó a las Partes que, en virtud de la presentación de los Memoriales arriba citados, la Secretaría de la LCIA solicitó al Tribunal Arbitral informar, tanto a dicha institución como a las Partes, la fecha en que estimase finalizar el Laudo, así como el tiempo reservado para llevar a cabo sus deliberaciones.
167. En el mismo correo, el Tribunal Arbitral hizo del conocimiento de las Partes que estaba en el proceso de analizar los diversos documentos que integran el expediente, a la luz de los memoriales presentados por las Partes, por lo que estimaba finalizar el Laudo a finales del mes de septiembre de 2022, para lo cual estaría realizando las deliberaciones periódicas necesarias en relación con las cuestiones controvertidas.
168. Además de lo anterior, a petición de la LCIA el Tribunal Arbitral informó a las Partes en el mismo correo que, de conformidad con el Reglamento, la LCIA únicamente remitiría en su oportunidad tanto a las Partes como al propio Tribunal, una versión electrónica del Laudo, así como una copia certificada a las Partes como cortesía, a no ser que las Partes solicitaran una versión original del Laudo. En virtud de lo anterior y a petición de la LCIA, el Tribunal Arbitral solicitó a las Partes que confirmasen si requerirán una versión original firmada del Laudo, que en tal caso les enviará la LCIA en su debido tiempo, ya sea en lugar de la copia certificada o además de ésta.
169. Las Partes respondieron a lo solicitado por el Tribunal Arbitral mediante sendos correos electrónicos de fecha 27 de mayo de 2022, manifestando ambas Partes que, además de la copia certificada del Laudo, y de la copia certificada que será enviada a las Partes por la LCIA como cortesía, las Partes consideran necesario recibir una versión original firmada del Laudo. La LCIA respondió mediante correo electrónico de fecha 30 de mayo de 2022, informando que tomó nota de lo anterior e indicando además que, por lo que respecta a la LCIA, esta no requerirá un ejemplar original del Laudo y únicamente se le deberán hacer llegar los ejemplares correspondientes a las Partes. En virtud de lo anterior, el Tribunal Arbitral procederá en consecuencia, como informó en su oportunidad a la LCIA y a las Partes mediante correo electrónico de fecha 30 de mayo de 2022.

X. PRETENSIONES DE LAS PARTES

170. Las pretensiones que a continuación se consignan, son las expresadas por las Partes en los puntos petitorios de sus respectivos memoriales y escritos; asimismo, en virtud de que en el cuerpo de los mismos se incluyen diversas pretensiones y peticiones que no se mencionan expresamente en sus puntos petitorios, también las ha considerado el Tribunal Arbitral a fin de resolver en su totalidad las cuestiones controvertidas.

Demandante

171. Según manifestó expresamente la Demandante, sus pretensiones y pretensiones son las siguientes:

- A. Se declaren procedentes el reclamo y peticiones de Empalme.⁵⁴
- B. Se declare que Empalme dio cumplimiento a sus obligaciones en términos del Contrato.⁵⁵
- C. Se declare que la Garantía Operativa venció el 9 de junio de 2019.⁵⁶
- D. Se emita un pronunciamiento respecto del estado que guarda cada una de las Deficiencias Menores y Reclamos de Garantías, así como las consecuencias que deriven de ello.⁵⁷
- E. Se resuelva que la ejecución de la Carta de Crédito HSBC, por parte de CFE, resulta ilegal y abusiva.⁵⁸
- F. Se ordene a CFE a reembolsar a Empalme el monto ejecutado en exceso a cargo de la Carta de Crédito.⁵⁹
- G. Se condene a CFE al pago de las prestaciones que presentó y se desprendan de los memoriales presentados por Empalme durante el procedimiento arbitral.⁶⁰
- H. Se declare procedente la terminación del Contrato, otorgándose para ello el Acta de Entrega Final y el Finiquito correspondiente.⁶¹
- I. Se bifurque el procedimiento a fin de que se pueda celebrar el Finiquito del

⁵⁴ Memorial de Demanda, página 302, ¶ A; Memorial Pre-Audiencia Empalme, página 27, ¶ A; Memorial de Cierre Empalme, página 39, ¶ A.

⁵⁵ Memorial de Demanda, página 302, ¶ B; Memorial Pre-Audiencia Empalme, página 27, ¶ B; Memorial de Cierre Empalme, página 39, ¶ B.

⁵⁶ Memorial Pre-Audiencia Empalme, página 27, ¶ C; Memorial de Cierre de Empalme, página 39, ¶ C.

⁵⁷ Memorial de Demanda, página 302, ¶ C; Memorial Pre-Audiencia Empalme, página 28, ¶ D; Memorial de Cierre de Empalme, página 39, ¶ D.

⁵⁸ Memorial de Demanda, página 302, ¶ D; Memorial Pre-Audiencia Empalme, página 28, ¶ E; Memorial de Cierre Empalme, página 39, ¶ E.

⁵⁹ Memorial de Demanda, página 302, ¶ E; Memorial Pre-Audiencia Empalme, página 28, ¶ F; Memorial de Cierre Empalme, página 39, ¶ F.

⁶⁰ Memorial de Demanda, página 302, ¶ F; Memorial Pre-Audiencia Empalme, página 28, ¶ G; Memorial de Cierre Empalme, página 39, ¶ G.

⁶¹ Memorial de Demanda, página 302, ¶ G; Memorial Pre-Audiencia Empalme, página 28, ¶ H; Memorial de Cierre Empalme, página 39, ¶ H.

Contrato con base en los lineamientos y órdenes impuestas por el Tribunal Arbitral.⁶²

- J. Se condene a CFE al pago de Costos Financieros cuando resulte aplicable.⁶³
- K. Se Condene a CFE a indemnizar a Empalme por todo otro concepto adicional declarativo o de condena, incumplimiento, daño, perjuicio, intereses, etc., que se derive de los hechos y reclamaciones materia del presente arbitraje.⁶⁴
- L. Se emitan todas las declaraciones que correspondan a fin de resolver los puntos litigiosos materia del presente arbitraje en favor de Empalme.⁶⁵
- M. Se condene a CFE al pago de los Costos del Arbitraje.⁶⁶

Demandada

172. Según manifestó expresamente la Demandada, sus pretensiones y pretensiones son las siguientes:

- A. Se declare que CFE actuó en el marco del Contrato, y por lo tanto los actos desplegados para la ejecución de la Garantía HSBC, se encuentran justificados.⁶⁷
- B. Se declare improcedente el reclamo de Empalme y se desechen sus pretensiones diferentes a la que CFE ha aceptado su pago.⁶⁸
- C. Se declare que Empalme no ha dado cumplimiento a sus obligaciones en términos del Contrato.⁶⁹
- D. Se declare el incumplimiento de la Demandante en la atención de las Deficiencias Menores.⁷⁰
- E. Se declare que la Demandante no atendió Deficiencias Menores y Reclamos de Garantías en los términos pactados en el Contrato y, en consecuencia, se resuelva que la ejecución de la Carta de Crédito HSBC, por parte de CFE, resulta legal.⁷¹
- F. Como consecuencia de lo anterior, se declare que es improcedente ordenar a CFE reembolsar a Empalme el monto ejecutado de la Carta de Crédito HSBC.⁷²

⁶² Memorial de Cierre Empalme, página 39, ¶ M.

⁶³ Memorial de Demanda, página 302, ¶ H; Memorial Pre-Audiencia Empalme, página 28, ¶ I; Memorial de Cierre Empalme, página 39, ¶ I.

⁶⁴ Memorial Pre-Audiencia Empalme, página 28, ¶ J; Memorial de Cierre Empalme, página 39, ¶ K.

⁶⁵ Memorial Pre-Audiencia Empalme, página 28, ¶ L; Memorial de Cierre Empalme, página 39, ¶ L.

⁶⁶ Memorial de Demanda, página 302, ¶ I; Memorial Pre-Audiencia Empalme, página 28, ¶ J; Memorial de Cierre Empalme, página 39, ¶ J.

⁶⁷ Contestación a la Demanda, página 695, ¶ A; Memorial Pre-Audiencia CFE, página 25, ¶ III.

⁶⁸ Contestación a la Demanda, página 696, ¶ B; Memorial Pre-Audiencia CFE, página 25, ¶ I; Memorial de Cierre CFE, página 45, Petitorio Primero.

⁶⁹ Contestación a la Demanda, página 696, ¶ C.

⁷⁰ Memorial Pre-Audiencia CFE, página 25, ¶ II.

⁷¹ Contestación a la Demanda, página 696, ¶ D; Memorial Pre-Audiencia CFE, página 25, ¶ IV.

⁷² Contestación a la Demanda, página 696, ¶ E.

- G. Se declare que la Demandante cumpla con su obligación de reponer el monto ejecutado por CFE a la Carta de Crédito HSBC.⁷³
- H. Se declare que, a consecuencia del incumplimiento de la Demandante en la atención de las Deficiencias Menores, CFE ha incurrido en erogaciones amparadas en la Garantía de Cumplimiento del Contrato.⁷⁴
- I. Se declare que CFE tiene el derecho de ejecutar la Garantía de Cumplimiento para la atención de las Deficiencias Menores y Reclamos de Garantías derivados de los incumplimientos de la Demandante.⁷⁵
- J. Se declare el reembolso de los trabajos ejecutados en la atención de la Deficiencia Menor 331 (DM331), por la falta de atención por parte de la Demandante.⁷⁶
- K. Se declare la reserva de derechos por parte de CFE, *relacionada con que la Demandante incumplió con su deber de atender las Deficiencias Menores y Reclamos de Garantías, por lo que se reserva sus derechos contractuales.*⁷⁷
- L. Se deseche la pretensión de condenar a CFE al pago de las prestaciones que ha presentado la Demandante por ser improcedentes y que eventualmente se desprendan de los memoriales presentados durante el procedimiento arbitral, por no realizarlo en el momento en que se ha fijado la litis.⁷⁸
- M. Se declare improcedente la terminación del Contrato, negando el derecho a otorgar el Acta de Entrega Final y el Finiquito de la Obra.⁷⁹
- N. Se condene a la Demandante a pagar a CFE todas las costas y gastos legales derivados del presente arbitraje en que ha incurrido CFE, en la parte proporcional de aquellas pretensiones que le sean negadas por carecer de acción para ejercerlas.⁸⁰
- O. Se solicita al Tribunal Arbitral que, antes de dictar el Laudo Final, emplace a CFE para actualizar los gastos erogados en la atención de las Deficiencias Menores y sus Costos Financieros asociados.⁸¹

⁷³ Contestación a la Demanda, página 696, ¶ F; Memorial Pre-Audiencia CFE, página 25, ¶ VI.

⁷⁴ Memorial Pre-Audiencia CFE, página 25, ¶ V.

⁷⁵ Contestación a la Demanda, página 696, ¶ G.

⁷⁶ Memorial Pre-Audiencia CFE, página 25, ¶ VII.

⁷⁷ Memorial de Cierre CFE, página 45, Petitorio Tercero.

⁷⁸ Contestación a la Demanda, página 696, ¶ H.

⁷⁹ Contestación a la Demanda, página 696, ¶ I.

⁸⁰ Contestación a la Demanda, página 696, ¶ J; Memorial Pre-Audiencia de CFE, página 25, ¶ VIII; Memorial de Cierre de CFE, página 45, Petitorio Segundo.

⁸¹ Memorial Pre-Audiencia de CFE, página 25, ¶ IX.

XI. CUESTIONES CONTROVERTIDAS A RESOLVER

173 De las pretensiones y peticiones de las Partes, que arriba se refieren en los términos en que fueron planteadas por estas en sus diversos memoriales y escritos, se desprende que los principales puntos litigiosos que deberá resolver el Tribunal Arbitral, son los siguientes:

- a. Determinar la fecha de vencimiento de la Garantía Operativa estipulada en la Cláusula 20.1 del Contrato, a la luz de la Cláusula Cuarta del Quinto Convenio Modificatorio al Contrato, de fecha 4 de marzo de 2019.
- b. Determinar si la ejecución de la Carta de Crédito HSBC, por parte de la Demandada, fue ilegal y abusiva o fue realizada de conformidad con las disposiciones del Contrato.
- c. Determinar si la Demandante cumplió sus obligaciones conforme al Contrato en relación con la atención de las Deficiencias Menores (DMs) y, en tal caso, determinar el estado de dichas DMs, así como las consecuencias que deriven.
- d. De haber incumplido la Demandante sus obligaciones conforme al Contrato, en relación con la atención de las Deficiencias Menores (DMs), determinar el efecto que debe tener el incumplimiento de la Demandante.
- e. Determinar si la Demandante cumplió sus obligaciones conforme al Contrato, en relación con la atención de los Reclamos de Garantías (RGs) y, en tal caso, determinar el estado de los mismos, así como las consecuencias que deriven.
- f. De haber incumplido la Demandante sus obligaciones conforme al Contrato, en relación con la atención de los Reclamos de Garantía (RGs), determinar el efecto que debe tener el incumplimiento de la Demandante.
- g. Determinar si existió exceso por parte de la Demandada en la ejecución de la Carta de Crédito HSBC y, de existir, determinar si procede que la Demandada reembolse a la Demandante el monto excedente.
- h. Determinar si es o no procedente la reclamación de la Demandante por concepto de gastos inherentes a la ejecución de la Carta de Crédito HSBC por parte de la Demandada.
- i. Determinar si es o no procedente la reclamación de la Demandante por concepto de avance de obra no reconocido en el Quinto Convenio Modificatorio del Contrato.
- j. Determinar si es o no procedente la reclamación de la Demandante por concepto de gastos y costos derivados del Acuerdo de fecha 16 de enero de

2019, celebrado entre Empalme y CFE sobre la aplicación de la Cláusula 25.5 del Contrato (Acuerdo 25.5).

- k. Determinar si es o no procedente la reclamación de la Demandante por concepto de trabajos adicionales o no previstos realizados por Empalme, gastos y costos derivados del Acuerdo de fecha 16 de enero de 2019, celebrado entre Empalme y CFE sobre la aplicación de la Cláusula 25.5 del Contrato (Acuerdo 25.5).
- l. Determinar la procedencia de las pretensiones y peticiones formuladas por la Demandante por concepto de liquidación total del Contrato, como consecuencia de sus reclamaciones anteriores.
- m. Determinar si es o no procedente la pretensión de la Demandante de que el Tribunal Arbitral decrete la Aceptación Final de la Planta y ordene a las Partes la suscripción del Finiquito de conformidad con la Ley de Obras Públicas y Servicios Relacionados con las Mismas.
- n. Decidir, de conformidad con el Artículo 28 del Reglamento de Arbitraje de la LCIA, cuál de las Partes o en qué proporción cada una de ellas deberá pagar los “Costos del Arbitraje” que determine la Corte de la LCIA, así como los “Costos Legales” que determine el Tribunal Arbitral.

XII. ANÁLISIS Y CONCLUSIONES DEL TRIBUNAL ARBITRAL

Fecha de vencimiento de la Garantía Operativa

174. Empalme sostiene que, de conformidad con el Quinto Convenio Modificatorio celebrado el 4 de marzo de 2019, la Garantía Operativa venció el 9 de junio de 2019⁸² y aporta una serie de elementos para sostener su postura:

- a. el mismo texto del Quinto Convenio Modificatorio;
- b. las negociaciones que dieron lugar al mencionado Convenio Modificatorio;
- c. la aceptación de la Carta de Crédito Banorte, con dicha fecha de vencimiento, por parte de CFE;
- d. la no oposición de CFE, a la propuesta de extensión de garantía; y,
- e. las declaraciones realizadas por CFE con posterioridad al 9 de junio de 2019, aceptando que la Garantía Operativa ya había vencido.

⁸² Memorial de Demanda, Apartado IV.

175. CFE, por su parte, sostiene que la fecha de vencimiento de la Garantía Operativa debe ser el 2 de julio de 2019.

Antecedentes

176. En la Cláusula 11.1 b) del Contrato se acordó la entrega de una carta de crédito irrevocable *standby* a favor de CFE, correspondiente a la Garantía Operativa (la “Carta de Crédito Banorte”), que debía ser equivalente al 10% del Precio del Contrato, a fin de garantizar el debido cumplimiento de Empalme de las obligaciones derivadas del Contrato en relación con la Garantía Operativa contemplada en la Cláusula 20.1. En la Cláusula 11.2 del Contrato se pactó que dicha carta de crédito permanecería vigente hasta que el Certificado de Aceptación Final de la Central se hubiera expedido.
177. Ante los distintos aplazamientos del Programa de Pruebas, provocados principalmente por la falta de autorización del CENACE para realizar Pruebas al 100% de Carga, la vigencia de la Garantía Operativa fue modificada mediante el Quinto Convenio Modificatorio al Contrato, conforme al cual CFE y Empalme establecieron, en la Cláusula Cuarta del mismo, una fecha determinada para el vencimiento de la Garantía Operativa.
178. Las partes pactaron en la Cláusula Cuarta del Quinto Convenio Modificatorio que:

“CUARTA. Las Partes ratifican la obligación del Contratista de entregar la Garantía Operativa, cuyo monto asciende a la cantidad de \$47'684,436.92 E.U.A

Así mismo, las Partes considerando que las prórrogas de la Fecha Programada de Aceptación Provisional, han sido por causas ajenas al Contratista, se deberá entender que la vigencia de la Garantía Operativa dio inicio en la fecha que resulte de la Fecha de Aceptación Provisional menos las prórrogas consideradas en el segundo, tercero, cuarto y el quinto Convenio, la cual permanecerá vigente por un año a partir del inicio de su vigencia, modificándose en este sentido la definición de "Periodo de Garantía" establecida en la Clausula 1.1.

Si la Comisión estuviera interesada en que la Garantía Operativa, permanezca vigente durante el periodo de 1 año desde la Aceptación Provisional, la Comisión de conformidad con lo establecido en el "ACUERDO ENTRE LAS PARTES SOBRE LA APLICACION DE LA CLAUSULA DE 25.5 PARA CUMPLIR EL OBJETO DEL CONTRATO PIF-017/2015", solicitará al Contratista la ampliación de la misma. El Contratista se obliga a realizar la ampliación tras la presentación de la oferta correspondiente y su aceptación por parte de la Comisión.

Así mismo, el Factor de Disponibilidad Equivalente Anual Garantizado (FDEAG) se mantendrá con el valor contractual del 99,1% hasta el 9 de Junio del 2019, fecha en la que vence la Garantía Operativa”.

Posición de Empalme

179. Empalme sostiene que del Quinto Convenio Modificatorio se desprende que ambas Partes pactaron el 9 de junio de 2019 como fecha determinada para la terminación de la vigencia de la Garantía Operativa y que, si CFE estuviera interesada en que la Garantía Operativa permaneciera vigente por un plazo adicional al 9 de junio de 2019, es decir por un período de un año contado a partir de la Aceptación Provisional, Empalme debía presentar una oferta a CFE para la ampliación de la garantía.
180. Empalme señala, además, que entregó a CFE la Carta de Crédito Banorte correspondiente a la Garantía Operativa el 26 de marzo de 2019,⁸³ en la que se establecía una fecha de vencimiento del 9 de junio de 2019, acompañada del Acta de Aceptación Provisional como anexo.
181. Agrega Empalme que ciertos borradores del Quinto Convenio Modificatorio reafirman esa fecha, y por tanto CFE debió haber tenido esto claro, ya que incluso la Carta de Crédito Banorte contaba con fecha de vencimiento del 9 de junio de 2019 y CFE aceptó dicha Carta de Crédito, que indica:

*“Esta Carta de Crédito permanecerá vigente hasta, y expirará automáticamente en, la primera de las siguientes fechas (la “Fecha de Terminación”): (I) la fecha en la cual el Banco Emisor reciba de la Comisión notificación por escrito de que la central de acuerdo con el Contrato ha logrado la aceptación final, (II) la fecha en la cual el Monto Máximo Garantizado hubiere sido pagado por el Banco Emisor contra la presentación por la Comisión de uno o más requerimientos de pago y (III) 9 de Junio de 2019 (“la Fecha de Vencimiento”)”.*⁸⁴ [énfasis de Empalme]

182. Empalme menciona que, tal y como estaba propuesto, sometió una propuesta a CFE para extender la vigencia de la Carta de Crédito Banorte, en la que planteó claramente extender la Garantía Operativa del 10 de junio de 2019 al 25 de marzo de 2020.⁸⁵ Al no aceptar CFE la propuesta, Empalme comunicó a CFE el 10 de junio de 2019⁸⁶ que, dado que ésta no ejerció su derecho a contratar la Extensión de la Garantía Operativa, la garantía venció el 9 de junio de 2019.⁸⁷
183. Por otra parte, Empalme indica que, en reuniones posteriores y a solicitud de CFE, envió a CFE el 12 de junio de 2019⁸⁸, la “propuesta de extensión de la Garantía Operativa Rev. 1”.

⁸³ CFE-POM27039-C-EPCDP-CFE-0417 (A-049)

⁸⁴ Carta de Crédito Banorte, adjunta a CFE-POM27039-C-EPCDP-CFE-0417 (A-049)

⁸⁵ Primera Oferta Ampliación Garantía Operativa, p.6 (A-055)

⁸⁶ Oficio CFE-POM27039-C-EPCDP-CFE-0441 de fecha 10 de junio de 2019. (A-056)

⁸⁷ Memorial de Demanda ¶ 114 y Memorial Pre-Audiencia Empalme, ¶¶ 26-27.

⁸⁸ Ampliación de Garantía Rev. 1 120619 (A-057)

Los ajustes a la propuesta no afectaron la extensión de la Garantía Operativa, que se mantenía del 10 de junio de 2019 al 25 de marzo de 2020.⁸⁹

184. Empalme sostiene también⁹⁰ que CFE le envió un oficio el 13 de junio de 2019⁹¹ en respuesta a la confirmación de que había vencido la Garantía Operativa, en el cual manifestó: “*1. De acuerdo a lo establecido en la Cláusula Cuarta del Quinto Convenio Modificatorio, el 09 de junio de 2019 venció la Garantía Operativa [...]*”.
185. Señala asimismo Empalme que, conforme a lo establecido en el artículo 1851 del Código Civil Federal, “*si los términos de un contrato son claros y no dejan duda sobre la intención de los contratantes, se estará al sentido literal de sus cláusulas.*”⁹²
186. En respuesta a lo sostenido por CFE en cuanto a que la referencia al 9 de junio de 2019 en el último párrafo de la Cláusula Cuarta del Quinto Convenio Modificatorio, únicamente se relaciona con la medición del Factor de Disponibilidad Equivalente Anual Garantizado (FDEAG), Empalme indica que, si bien es cierto que las Partes acordaron que el valor contractual del Factor de Disponibilidad Equivalente Anual Garantizado se mantuviera hasta el 9 de junio de 2019, también es cierto que, como se establece claramente en dicho párrafo, la razón de la determinación de dicha fecha corresponde a que es precisamente a fecha de vencimiento de la Garantía Operativa.⁹³
187. Finalmente, Empalme añade que “*... de manera sorpresiva y contradictoria, tan solo unos días después de realizar las declaraciones mencionadas anteriormente, mediante oficio de fecha 17 de junio de 2019,*⁹⁴ *CFE modificó de manera radical su postura sobre la Cláusula Cuarta del Quinto Convenio Modificatorio y la vigencia de la Garantía Operativa. En dicho oficio CFE comenzó a sostener que la Garantía Operativa vencía el 2 de julio de 2019, posición que ha sostenido hasta el día de hoy*”.⁹⁵

Posición de CFE

188. CFE, por su parte, concuerda en que el antecedente del Quinto Convenio Modificatorio fue la omisión del CENACE en autorizar la realización de las Pruebas de Desempeño y las Pruebas al 100% de Carga; y sostiene que, por lo anterior, en la cláusula Primera del Quinto Convenio Modificatorio las Partes acordaron prorrogar por 158 días la Fecha Programada de Aceptación

⁸⁹ Ampliación de Garantía Rev 1 120619; Oferta, ¶ 3.ALCANCE, p. 6 (A-057)

⁹⁰ Memorial de Demanda, ¶ 121-123.

⁹¹ 742.160/JALV-083/19 (A-047)

⁹² Memorial Pre-Audiencia Empalme, ¶ 23.

⁹³ Memorial Pre-Audiencia Empalme, ¶ 30.

⁹⁴ 742.160/JALV-086/19 (A-048)

⁹⁵ Memorial de Demanda, ¶ 81.

Provisional, estableciendo como nueva fecha el 24 de agosto de 2018⁹⁶, pero que, “*derivado de los retrasos acumulados imputables por (sic) el Contratista en la ejecución del Proyecto, no fue posible alcanzar la fecha Programada de Aceptación Provisional (24 de agosto de 2018) en el Quinto Convenio Modificatorio*”.⁹⁷

189. La Partes suscribieron el Certificado de Aceptación Provisional (“CAP”) el 26 de marzo de 2019, en el que se estipuló que conforme a la Cláusula 18.1 del Contrato se formalizaría un Acta de Aceptación Provisional, que se firmaría con fecha 26 de marzo de 2019, en donde se señalarían, entre otras, las Deficiencias Menores detectadas que deberían ser corregidas por el Contratista conforme a la Cláusula 18.4 del Contrato, dentro de los 60 días posteriores a la emisión del CAP, es decir, antes del 25 de mayo de 2019⁹⁸. Dicha Acta efectivamente se firmó con esa fecha, y se agregó como parte integrante de la misma un Anexo II, donde se enlistó un total de 586 Deficiencias Menores (DM’s)⁹⁹.
190. El CAP consideró que las prórrogas de la Fecha Programada de Aceptación Provisional habían sido por causas ajenas a Empalme, y es por ello que debe entenderse que la vigencia de la Garantía Operativa dio inicio en la fecha resultante de la fecha de Aceptación Provisional (es decir 26 de marzo del año 2019), menos las prórrogas consideradas en el Segundo (73 días), Tercero (24 días), Cuarto (12 días) y Quinto (158 días) Convenio Modificatorio; y permanecería vigente por un año a partir del inicio de su vigencia.
191. Para CFE,¹⁰⁰ el Contratista actuó con mala fe contractual y omitió señalar que el Quinto Convenio Modificatorio establece que:

“Así mismo, las Partes considerando que las prórrogas de la Fecha Programada de Aceptación Provisional, han sido por causas ajenas al Contratista, se deberá entender que la vigencia de la Garantía Operativa dio inicio en la fecha que resulte de la Fecha de Aceptación Provisional menos las prórrogas consideradas en el segundo, tercero, cuarto y el quinto Convenio, la cual permanecerá vigente por un año a partir del inicio de su vigencia, modificándose en este sentido la definición de “Período de Garantía” establecida en la cláusula 1.1.” [énfasis de CFE]

192. Conforme a ello, CFE sostiene que la vigencia de la Garantía Operativa debe empezar a partir de la emisión del CAP, menos las prórrogas del segundo, tercero, cuarto y quinto Convenios

⁹⁶ Contestación a la Demanda, ¶¶ 23 y 24.

⁹⁷ Contestación a la Demanda, ¶¶ 25 a 28.

⁹⁸ Anexo D-004.

⁹⁹ Anexo D-002.

¹⁰⁰ Contestación a la Demanda, ¶ 30.

Modificatorios; y agrega que en el Quinto Convenio Modificatorio también se señala en la Cláusula Primera que la nueva fecha para la emisión del CAP es el 24 de agosto de 2018.¹⁰¹

193. CFE distingue entre la “Garantía Operativa” y el “Período de Garantía”, y señala que Empalme erróneamente los confunde. En tanto que (a) el “Período de Garantía”, de conformidad con la Cláusula 1.1 del Contrato se define como “... *el periodo que comienza en la Fecha de Aceptación Provisional de la Central y que termina en lo que ocurra primero: (i) el primer aniversario de la Fecha de Aceptación Provisional correspondiente a la Central; o (ii) la fecha determinada de conformidad con la Cláusula 20.4 “Ampliación del Período de Garantía”*”; y (b) la “Garantía Operativa” se prevé en la cláusula 11.1.b) como “... *una carta de crédito irrevocable stand-by, a favor de la Comisión emitida en México ... a fin de garantizar el debido, propio y absoluto cumplimiento por parte del Contratista de todas sus obligaciones derivadas del presente Contrato de acuerdo a la Cláusula 20*”.¹⁰²
194. Por lo tanto, señala CFE, la vigencia que mantenga la Garantía Operativa (Carta de Crédito Banorte), no implica de forma alguna que se extingan las obligaciones del Contratista durante el “Período de Garantía”.¹⁰³
195. CFE insiste en que el Período de Garantía resulta de los acuerdos del Quinto Convenio Modificatorio –ratificados en el CAP– consistente en un período que inició el 2 de julio de 2018 y finalizó el 2 de julio de 2019; y tanto la propia Cláusula Cuarta del Quinto Convenio Modificatorio, como el CAP, señalan que el Período de Garantía dio inicio en la fecha de la emisión del CAP, menos las prórrogas consideradas en el segundo, tercero, cuarto y quinto Convenios, y permanecerá vigente por un año a partir del inicio de su vigencia. CFE lo resume en la siguiente *aritmética básica*:¹⁰⁴

- Prórroga en Convenio Modificatorio No. 2 - 73 días
- Prórroga en Convenio Modificatorio No. 3 - 24 días
- Prórroga en Convenio Modificatorio No. 4 - 12 días
- Prórroga en Convenio Modificatorio No. 5 - 158 días
- Total de días Prorrogados = 267 días
- Fecha de Aceptación Provisional - 26 de marzo de 2019

Por lo tanto,

Fecha de Inicio del Periodo de Garantía: 2 de julio de 2018
(26 de marzo de 2019; menos 267 días prorrogados,

¹⁰¹ Contestación a la Demanda, ¶ 31.

¹⁰² Contestación a la Demanda, ¶ 35.

¹⁰³ Contestación a la Demanda, ¶ 36.

¹⁰⁴ Contestación a la Demanda, ¶ 42.

igual a 2 de julio de 2018).

Si el Periodo de Garantía es de un año, vence el 2 de julio de 2019.

196. En respuesta a los argumentos de la Demandante al pretender señalar que CFE aceptó la Carta de Crédito Banorte con fecha de vencimiento 9 de junio de 2019 y esto es muestra de que el Periodo de Garantía vencía en esa fecha, CFE sostiene que lo anterior es erróneo, puesto que la carta de crédito solo es un instrumento que ampara el Periodo de Garantía, y no así la vigencia de dicho período, ya que Empalme pudo haber garantizado con diferentes cartas de crédito el multicitado Periodo de Garantía, que venció el 02 de julio de 2019.¹⁰⁵ No hay sustento, asevera CFE, para concluir que con la recepción y aceptación de la Carta de Crédito Banorte CFE haya aceptado reducción alguna del Periodo de Garantía.¹⁰⁶

Análisis del Tribunal Arbitral

197. Es un hecho que, tanto el Quinto Convenio Modificatorio (4 de marzo de 2019) como el Certificado de Aceptación Provisional (26 de marzo de 2019), establecen que la vigencia del Periodo de Garantía se computará de la misma manera; y asimismo, ambas Partes coinciden en que el origen del cambio fueron las demoras del CENACE antes referidas, así como la necesidad de brindar protección a Empalme frente a la incertidumbre técnica y jurídica que derivaría del reiterado diferimiento de la realización de las Pruebas de Desempeño y de Carga con Capacidad al 100%.
- a. Quinto Convenio: “... la vigencia de la Garantía Operativa dio inicio en la fecha que resulte de la Fecha de Aceptación Provisional menos las prórrogas consideradas en el segundo, tercero, cuarto y el quinto Convenio, la cual permanecerá vigente por un año a partir del inicio de su vigencia ...”
 - b. CAP: “Así mismo, las Partes considerando que las prórrogas de la fecha programada de Aceptación Provisional, han sido por causas ajenas al contratista, se deberá entender que la vigencia de la Garantía Operativa dio inicio en la fecha que resulte de la Fecha de Aceptación Provisional menos las prórrogas consideradas en el Segundo, Tercero, Cuarto y Quinto Convenio Modificatorio, la cual permanecerá vigente por un año a partir del inicio de su vigencia. Lo anterior se sustenta conforme a lo establecido en el Convenio Modificatorio No. 5”.
198. Tal y como argumenta CFE, de una simple operación aritmética resulta determinar la fecha de inicio y, por ende, la de terminación de la Garantía Operativa. Según los cálculos para tal efecto, que ninguna de las partes disputa, resultan dos premisas fundamentales: (a) la fecha de Aceptación Provisional, es la fecha en que se suscribió el CAP (26 de marzo de 2019); y, (b)

¹⁰⁵ Contestación a la Demanda, ¶¶ 52 y 53.

¹⁰⁶ Contestación a la Demanda, ¶ 57

el número de días acumulados en las prórrogas de los convenios modificatorios contemplados, que da un total de 267 días. Cuando se sustraen los 267 días de dichas prórrogas del 26 de marzo de 2019, que fue la fecha de Aceptación Provisional, el resultado es que la Fecha de Inicio del Período de Garantía debe ser el 2 de julio de 2018. En consecuencia, si el Período de Garantía tiene una duración de un año, este vence indiscutiblemente en la fecha que sostiene CFE; es decir, el 2 de julio de 2019.

199. Aun cuando es cierto que el Quinto Convenio Modificatorio señala en el último párrafo de la Cláusula Cuarta el 9 de junio de 2019 como “... *fecha en la que vence la Garantía Operativa*”; y también es cierto que existen otros elementos que así lo sostienen (referencia a esa fecha en la Carta de Crédito Banorte¹⁰⁷, oficio de CFE 742.160/JALV-083/19¹⁰⁸), el Tribunal Arbitral advierte que, más allá del argumento de CFE en el sentido de que el último párrafo de dicha cláusula únicamente se relaciona con la medición del Factor de Disponibilidad Equivalente Anual Garantizado (FDEAG), lo cual el Tribunal considera pertinente, la pretensión de la Demandante en relación con dicho párrafo resulta totalmente carente de lógica si se toma en cuenta la circunstancia de que el Quinto Convenio Modificatorio se suscribió con fecha 4 de marzo de 2019, y en esa fecha era evidentemente imprevisible la fecha en que sería emitido el CAP, cuya emisión sería el punto de partida para determinar la vigencia del Período de Garantía y de la Garantía Operativa.
200. Por esa razón, en esa tesitura resulta notoriamente improcedente atribuir al último párrafo de la Cláusula Cuarta del Quinto Convenio Modificatorio el alcance que pretende la Demandante, toda vez que implicaría dejar sin razón de ser los párrafos precedentes de dicha cláusula, que precisamente constituyen la razón de ser de la misma, así como del propio convenio en cuestión. Interpretar dicha cláusula y su último párrafo de esa manera, implicaría *entender comprendidas en ellos casos diferentes de aquéllos sobre los que las Partes se propusieron contratar*, y además sería dar a dicha cláusula un *sentido totalmente inadecuado para que produjera efecto*, contrariamente a lo dispuesto por los artículos 1852 y 1853 del Código Civil Federal. Todo lo anterior, en opinión del Tribunal Arbitral, permite concluir que la mención del *9 de junio de 2019* de la manera que se comenta, no puede interpretarse sino como una inadvertencia o equivocación equiparable a un error de cálculo, mas no como una manifestación de la intención de las Partes.
201. Para conocer la voluntad de las Partes, el Tribunal Arbitral debe llevar a cabo inicialmente, en los términos del artículo 1851 y siguientes del Código Civil Federal,¹⁰⁹ una interpretación

¹⁰⁷ Anexo A-049 al Memorial de Demanda.

¹⁰⁸ Anexo A-049 al Memorial de Demanda.

¹⁰⁹ Conforme al 1851 del Código Civil Federal, “[s]i los términos de un contrato son claros y no dejan duda sobre la intención de los contratantes, se estará al sentido literal de sus cláusulas” y “[s]i las palabras parecieren contrarias a la intención

gramatical y, de ser necesario sistemática, de todos los párrafos de la Cláusula Cuarta del Quinto Convenio Modificatorio, así como de las disposiciones del CAP; interpretando, además, *unas cláusulas por las otras* de conformidad con el objeto y la naturaleza del Contrato, en los términos de los artículos 1854 y 1855 de dicho código y además tomando en cuenta lo dispuesto por el artículo 1853 antes citado.

202. De una interpretación gramatical de la cláusula mencionada, resulta claro que la intención de las Partes fue establecer la Fecha de Inicio del Periodo de Garantía, con base en una referencia determinada: la fecha de suscripción del CAP. Asimismo, resulta claro que, para determinar el periodo de vigencia de la Garantía Operativa, a esa fecha de suscripción del CAP debía restársele un número de días equivalente a las prórrogas acordadas en el Segundo, Tercero, Cuarto y Quinto Convenios Modificatorios.
203. No solamente no hay duda de ello, sino también es evidente que el razonamiento que guio la intención de las Partes fue reconocer que las prórrogas no habían sido necesarias por causa de Empalme (ni por causa de CFE), sino por omisiones del CENACE. Al descontar el número de días establecidos como prórrogas, se brindaba un beneficio a Empalme para reconocer desde cuándo, “*de hecho*”, debía reconocerse una “aceptación provisional” de la Central objeto del Contrato.
204. Conforme al artículo 1851 del Código Civil Federal, “... *si las palabras parecieren contrarias a la intención evidente de los contratantes, prevalecerá ésta sobre aquéllas*”.
205. Las bases para definir la fecha que las Partes deseaban como Fecha de Inicio del Periodo de Garantía resultan claras y, además, debemos interpretar esa redacción con el contexto de los acuerdos (esto es, los cinco convenios modificatorios) que fueron suscritos por las Partes, de donde se desprende que las demoras no eran atribuibles a Empalme. Si la intención de las Partes en cada uno de esos convenios era extender el plazo para la realización de diversos Eventos Críticos, y específicamente para redefinir cada vez la Fecha Programada para la Aceptación Provisional, ese es el plazo que debe considerarse para efectos de definir la Fecha de Inicio de la vigencia de la Garantía Operativa.
206. Consecuentemente, en virtud de todas las consideraciones anteriores y ante la discrepancia entre los términos de disposiciones contractuales expresas (Cláusulas 11.1, 18.1 y 20 del Contrato y Clausula Cuarta del Quinto Convenio Modificatorio) y la alusión al 9 de junio de 2019 en ciertos documentos relacionados, que sin embargo no constituyen por sí mismos acuerdos de voluntades y por tanto no son vinculantes para las Partes (Carta de Crédito

evidente de los contratantes, prevalecerá ésta sobre aquéllas”. Escrito de Respuesta a Objeción, ¶¶140 et seq; CL-5, artículos 1851 al 1857 del Código Civil Federal.

Banorte¹¹⁰, propuestas de Empalme a CFE para extensión de la Garantía Operativa¹¹¹, oficio de CFE a Empalme en respuesta a su primera propuesta¹¹²), el Tribunal Arbitral concluye que se deben estimar las referencias al 9 de junio de 2019, como una equivocación que por su naturaleza constituye un simple “error de cálculo”. En términos del artículo 1814 del Código Civil Federal, el error de cálculo solo da lugar a que se rectifique. No opera siquiera como un vicio del consentimiento.

207. Evidentemente, la fecha procedente conforme a los términos del Contrato y de la Cláusula Cuarta del Quinto Convenio Modificatorio, es decir el 2 de julio de 2019, tiene relevancia en el caso debido a que los reclamos presentados por CFE durante la vigencia de la Garantía Operativa, deben ser atendidos por Empalme, siempre y cuando procedan, tanto por su naturaleza, como bajo los términos y condiciones del Contrato.

Ejecución legal o ilegal de Carta de Crédito HSBC

Posición de Empalme

208. Inmediatamente después de formular su Solicitud de Arbitraje¹¹³, la Demandante formuló la Petición de Medidas de Emergencia antes referida, que amplió a continuación,¹¹⁴ con motivo de la ejecución parcial de la Carta de Crédito HSBC llevada a cabo por la Demandada, que Empalme siempre ha considerado violatoria de los términos del Contrato.
209. En su Memorial de Demanda, Empalme continúa esa misma línea argumentativa y manifiesta que la Garantía de Cumplimiento “*se encuentra vinculada precisamente a garantizar el debido cumplimiento de las obligaciones a cargo de Empalme contenidas en la Cláusula 20.2 del Contrato ... [y en adición] existen obligaciones concretas amparadas por la Garantía Operativa ... [y] De especial interés para este caso es el contenido de las Cláusulas 20.5 y 20.6 del Contrato ... pues, como se expondrá, CFE ejecutó la Carta de Crédito HSBC (Garantía de Cumplimiento) a su entero capricho, sin observar las disposiciones contractuales para ello y, concretamente, el hecho de que cada una de las Cartas de Crédito se encontraba relacionada con obligaciones específicas y contractuales.*”¹¹⁵
210. Según argumenta Empalme, la ejecución de la Carta de Crédito HSBC viola el Contrato en virtud de que no reunió las condiciones requeridas para tal efecto, toda vez que conforme a la Cláusula 11.3 del Contrato (Cobro de las Garantías)¹¹⁶, “... La Comisión tendrá el derecho

¹¹⁰ Anexo A-049 al Memorial de Demanda.

¹¹¹ Anexos A-055 y A-057 al Memorial de Demanda.

¹¹² Anexo A-047 al Memorial de Demanda.

¹¹³ Solicitud de Arbitraje.

¹¹⁴ Petición de Medidas de Emergencia y Ampliación de Petición.

¹¹⁵ Memorial de Demanda, ¶¶ 165 a 168.

¹¹⁶ Memorial de Demanda, ¶ 171.

de hacer efectivas la Garantía de Cumplimiento y la Garantía Operativa con el propósito de cobrar ... (iv) cualquier otra cantidad prevista a favor de la Comisión en el Contrato, incluyendo sin limitación, aquellas relativas a descuentos por incumplimiento de las obligaciones a cargo del Contratista conforme al Contrato. En el caso de que la Comisión haga efectiva la Garantía de Cumplimiento o la Garantía Operativa por cualquiera de las razones antes especificadas, la Comisión notificará al Contratista la cantidad retirada y las razones correspondientes...”

211. Asevera Empalme¹¹⁷ que dicha Cláusula 11.3 establece las hipótesis que darían lugar a la ejecución de las Cartas de Crédito, así como los requisitos para ello, como es el de “...poner en conocimiento de Empalme tanto la cantidad retirada como las razones que habrían dado lugar a ello ... cuestión [que] fue ignorada por CFE. Al respecto, Empalme sostiene que no se colocó en una situación de incumplimiento que pudiere haber justificado dicha ejecución y, además, la ejecución de la Carta de Crédito HSBC era improcedente por no estar vinculada con Reclamos de Garantía; toda vez que “...mientras que la Garantía de Cumplimiento (Carta de Crédito HSBC), se relaciona con las obligaciones contenidas en el inciso a) de la Cláusula 11.1 del Contrato y en las Cláusulas 20.2, y 18.5 del Contrato; la Garantía Operativa (Carta de Crédito Banorte), se refiere únicamente a aquellas cuestiones atinentes al inciso b) de la Cláusula 11 del citado acuerdo de voluntades.”
212. Empalme sostiene que “... CFE únicamente se encontraba facultada para ejecutar cada Carta de Crédito al actualizarse los incumplimientos amparados por cada una de ellas. Las Cartas de Crédito no podían ejecutarse de manera indistinta, pues cada una tenía su fin, objeto y propósito específico ... [y] CFE ejecutó la Carta de Crédito HSBC, vinculada a la Garantía de Cumplimiento y, por ende, únicamente era aplicable para aquellos incumplimientos inherentes al inciso a) de la Cláusula 11 del Contrato, no obstante que dentro de los motivos por los que habría ejecutado dicha carta de crédito se encontrarían pretendidos incumplimientos inherentes a la supuesta falta de atención de Reclamos de Garantía, mismos que serían objeto de las Cláusulas 20.5 y 20.6 del Contrato y, como consecuencia, amparadas únicamente por la Garantía Operativa (Carta de Crédito Banorte)”.¹¹⁸
213. En relación con la Garantía Operativa, la Demandante manifiesta¹¹⁹ que en cumplimiento de lo pactado en el Quinto Convenio Modificatorio, conforme al cual se obligó a presentar una oferta a CFE para el caso de que estuviera interesada en que la Garantía Operativa permaneciera vigente durante un periodo adicional de un año contado a partir de la Aceptación Provisional, mediante oficio de fecha 13 de mayo de 2019 remitió a CFE una propuesta de

¹¹⁷ Memorial de Demanda, ¶¶ 172 a 179.

¹¹⁸ Memorial de Demanda, ¶¶ 180 y 181.

¹¹⁹ Memorial de Demanda, ¶¶ 110 a 118.

extensión de la Garantía Operativa, que fue recibida por CFE en la misma fecha,¹²⁰ para extender dicha Garantía del 10 de junio de 2019 al 25 de marzo de 2020,¹²¹ es decir, después del 9 de junio de 2019, fecha de vencimiento de la Garantía Operativa conforme a lo pactado en el Quinto Convenio Modificatorio.

214. La Demandante añade que la Demandada no se opuso o manifestó cualquier tipo de inconformidad en relación con el término por el cual se proponía la ampliación, lo que equivale a un reconocimiento o aceptación tácita de que la Garantía Operativa vencía el 9 de junio de 2019 y por tanto su ampliación debía de realizarse a partir del 10 de junio de 2019; y asimismo, CFE y Empalme tuvieron varias reuniones para discutir dicha propuesta, seguida de una “Revisión 1” de la misma pero con el mismo período de vigencia, y finalmente CFE no aceptó la propuesta de Empalme y optó por no extender la Garantía Operativa.
215. Además de todo lo anterior, Empalme reitera que “...CFE se ha abstenido de señalar las circunstancias y razones que le habrían llevado a ejecutar la Carta de Crédito HSBC. En su somero comunicado del 2 de abril de 2020, CFE indicó como fundamento de su actuar ciertos Reclamos de Garantía y Deficiencias Menores que, supuestamente no habrían sido atendidos por Empalme ... [y] en el supuesto negado y no concedido de que ello fuere cierto, ello no daría derecho a CFE a ejecutar la Carta de Crédito HSBC, puesto que dicha garantía no tiene por objeto amparar estos supuestos incumplimientos ...”, lo cual hace que sea ilegal la ejecución de la Carta de Crédito HSBC “... haciendo de lado las estipulaciones contractuales que determinaban que la Carta de Crédito HSBC no podía ser ejecutada por CFE en relación con los Reclamos de Garantía”.¹²²
216. Empalme también aduce que, para estar en aptitud de ejecutar la Carta de Crédito HSBC por incumplimientos relacionados con la atención de Deficiencias Menores, conforme a la Cláusula 18.4 del Contrato CFE estaba obligada a acreditar la existencia de demoras injustificadas en la atención de dichas deficiencias, lo cual no hizo en forma alguna; y además, “... CFE simplemente no llevó a cabo un análisis previo para la ejecución de la Carta de Crédito HSBC ... [y] no fue sino hasta que CFE ejecutó la Carta de Crédito HSBC que ésta dio inicio a Procedimientos de Contratación y adjudicó contratos relacionados con las Deficiencias Menores y Reclamos de Garantía ejecutados”¹²³.
217. Según argumenta la Demandante, lo anterior “... implica que, por lo menos en lo que respecta a las Deficiencias Menores y Reclamos de Garantía relacionados con los procedimientos de contratación mencionados, CFE no contó con un monto cierto en relación con lo que costaría su atención ... Es decir, CFE procedió a la ejecución de USD \$13’627,892.00 de la Carta de

¹²⁰ Oficio CFE-P0M27039-C-EPCDP-CFE-0428 de fecha 13 de mayo de 2019 (A-054).

¹²¹ Primera Oferta de Ampliación de Garantía Operativa, p.6 (A-055).

¹²² Memorial de Demanda, ¶¶ 182 a 184.

¹²³ Memorial de Demanda, ¶¶ 188 a 220.

*Crédito HSBC sin siquiera tener certeza de las cantidades que serían requeridas para atender al menos ciertas Deficiencias Menores y Reclamos de Garantía con base en las cuales realizó dicha ejecución ... [y] pretende hacer creer al Tribunal Arbitral que no se encontraría obligada a proporcionar un detalle respecto de los conceptos y razones de ejecución ...”.*¹²⁴

Posición de CFE

218. La Demandada manifiesta¹²⁵ que la Demandante sostiene erróneamente que la *Garantía Operativa* es lo mismo que el *Período de Garantía*, siendo que se trata de dos instrumentos distintos establecidos en el Contrato, y en apoyo de su posición se remite a la definición del *Período de Garantía* en la Clausula 1.1 del mismo, en los siguientes términos:

“1.1 Definiciones. ...

“Período de Garantía” significa en relación con el Proyecto, el periodo que comienza en la Fecha de Aceptación Provisional de la Central y que termina en lo que ocurra primero: (i) el primer aniversario de la Fecha de Aceptación Provisional correspondiente a la Central; o (ii) la fecha determinada de conformidad con la Cláusula 20.4 “Ampliación del Período de Garantía”.

219. En relación con lo anterior, la Demandada hace notar¹²⁶ que a partir del Quinto Convenio Modificatorio, de conformidad con el segundo párrafo de la Cláusula Cuarta del mismo “... se deberá entender que la vigencia de la *Garantía Operativa* dio inicio en la fecha que resulte de la *Fecha de Aceptación Provisional* [26 de marzo de 2029] menos las prórrogas consideradas en el segundo, tercero, cuarto y el quinto Convenio [267 días], la cual permanecerá vigente por un año a partir del inicio de su vigencia [2 de julio de 2018], modificándose en este sentido la definición de “*Período de Garantía*” establecida en la *Cláusula 1.1*”.
220. Asimismo, en relación con la *Garantía Operativa* la Demandada hace notar¹²⁷ que la Cláusula 11.1 b) del Contrato dispone que:

“...el Contratista deberá entregar a la Comisión, por cuenta y costo dentro de los 15 (quince) Días posteriores a la notificación de terminación de las Obras en cuestión a que se refiere la Cláusula 18.1, una carta de crédito irrevocable stand-by, a favor de la Comisión emitida en México por alguna institución de banca de desarrollo mexicana o bien ... a fin de garantizar el debido, propio y absoluto cumplimiento por parte del Contratista de todas sus obligaciones derivadas del presente Contrato de acuerdo a la

¹²⁴ Memorial de Demanda, ¶¶ 221 a 223.

¹²⁵ Contestación a la Demanda, ¶¶ 32 y 33.

¹²⁶ Contestación a la Demanda, ¶ 34.

¹²⁷ Contestación a la Demanda, ¶ 35.

Cláusula 20 (la “Garantía Operativa”).

El monto de la Garantía Operativa deberá ser igual al 10% (diez por ciento) del Precio del Contrato.”

221. Por lo que hace al alcance de la Garantía Operativa, la Demandada se refiere¹²⁸ a la Cláusula 20.1 del Contrato (“Garantía Operativa”), que la regula en los siguientes términos:

“20.1 Garantía Operativa. El Contratista garantiza que las Obras relacionadas con la Central, una vez lograda la Aceptación Provisional de la Central, cumplirán estrictamente con las Especificaciones del Contrato, y que estarán fabricadas y realizadas conforme a los Estándares de la Industria en forma técnicamente eficiente y completa, así como la continuidad de la operación de las Obras. ... No obstante la recepción formal de las Obras, el Contratista quedará obligado, a lo largo del Período de Garantía aplicable, a responder de los Defectos que resultaren de las mismas, por vicios ocultos, y de cualquier otra responsabilidad en que hubiere incurrido, en los términos señalados en el presente Contrato y en el Código Civil Federal. ...”

222. Como complemento de todo lo anterior, argumenta la Demandada¹²⁹ que “... *se podrá comprender que la vigencia que mantenga esta Garantía Operativa (Carta de Crédito), no implica de forma alguna que se extingan las obligaciones del Contratista ya que dicho instrumento es para que garantice las Obras relacionadas con la Central durante el “Periodo de Garantía” determinado...*” y destaca la importancia de definir la Garantía de Cumplimiento de conformidad con la Cláusula 11.1 a) del Contrato, conforme a la cual:

“...el Contratista deberá entregar a la Comisión, por cuenta y costo del Contratista, dentro de los 15 (quince) Días siguientes a la fecha de notificación del Fallo, una carta de crédito irrevocable stand-by a favor de la Comisión emitida en México por alguna institución de banca de desarrollo mexicana o bien ... a fin de garantizar el debido, propio y absoluto cumplimiento por parte del Contratista de todas sus obligaciones derivadas del presente Contrato distintas a sus Obligaciones establecidas en la Cláusula 20.2 (la ‘Garantía de Cumplimiento’) ...”

223. Procediendo de manera semejante al caso de la Garantía Operativa, la Demandada se refiere¹³⁰ a la Cláusula 20.2 del Contrato, que dispone lo siguiente:

“20.2 Garantías de Cumplimiento. El Contratista garantiza que la Central logrará cumplir con los Valores Garantizados. El incumplimiento de cualquier Valor Garantizado, excepto el FDEAG, dará el derecho a la Comisión de deducir del Precio del Contrato las cantidades establecidas en el Anexo 13. En caso de disputa se estará a los dispuesto en la

¹²⁸ Ibidem.

¹²⁹ Contestación a la Demanda, ¶¶ 36 y 37.

¹³⁰ Contestación a la Demanda, ¶ 37.

Cláusula 30.2

El incumplimiento de FDEAG dará derecho a cobrar de la Garantía Operativa la indemnización que corresponda en términos del Anexo 13.”

224. Para concluir su argumentación en relación con estas cuestiones, la Demandada manifiesta¹³¹ que, como se aprecia en las definiciones contractuales que fueron citadas, el Contrato señala lo que constituye la Garantía Operativa y el Período de Garantía y permite advertir que “... la primera no es más que un Instrumento Bancario (Carta de Crédito Stand-by) que ampara el Período de Garantía” y “Son demasiadas evidencias, que dan crédito de que la Garantía Operativa (carta de crédito Banorte) consiste solamente en una Carta de Crédito que ampara determinadas obligaciones del Contratista, sin embargo, **no determina la vigencia del Período de Garantía**”.
225. Finalmente, manifiesta la Demandada¹³² que “[l]o único que las Partes pactaron acerca de la Garantía Operativa carta de crédito Banorte es que **“Así mismo, el Factor de Disponibilidad Equivalente Anual Garantizado (FDEAG) se mantendrá con el valor contractual del 99.1% hasta el 9 de junio del 2019, fecha en la que vence la Garantía Operativa**”; y “[n]o hay sustento para determinar que con la recepción de la Carta de Crédito Banorte que consiste en la Garantía Operativa, cuya vigencia indicaba el 09 de junio de 2019, esta Comisión haya aceptado reducción alguna sobre el Periodo de Garantía pactado en el Quinto Convenio y el CAP de la Central Ciclo Combinado Empalme I”; y “...como se desprende de la propia lectura de la argumentación del Contratista, en ningún momento se hace alusión o se pretende modificar lo establecido para Periodo de Garantía dado que ello ya había sido perfectamente acordado ..., por lo que aún y cuando dicho instrumento [la Carta de Crédito Banorte] indicará (sic) su vencimiento el 09 de junio de 2019, **ello no extingue la obligación del Contratista en renovar esta Carta de Crédito por todo el Periodo de Garantía que resulte aplicable**”. [énfasis de la Demandada]
226. En apoyo de su posición en relación con la pretendida procedencia de ejecución de la Carta de Crédito HSBC, la Demandada reitera sus manifestaciones anteriores en relación con las disposiciones contractuales a que antes se hizo referencia, que complementa con la aseveración de que “... la Cláusula 11.3 “Cobro de las Garantías” del Contrato, estipula que la Comisión tendrá derecho a hacer efectivas la Garantía de Cumplimiento y Garantía Operativa con el propósito de cobrar ... [entre otros] cualquier otra cantidad prevista a favor de la Comisión en el Contrato, incluyendo sin limitación, **aquellas relativas a descuentos por incumplimiento de las obligaciones a cargo del Contratista conforme al Contrato**”. También manifiesta la Demandada que, conforme a esa misma cláusula, “En el caso de que la Comisión haga efectiva la Garantía de Cumplimiento o la Garantía Operativa por

¹³¹ Contestación a la Demanda, ¶¶ 38 a 53.

¹³² Contestación a la Demanda, ¶¶ 55 a 61.

cualquiera de las razones antes especificadas, la Comisión notificará al Contratista la cantidad retirada y las razones correspondientes” y “El Contratista contará con 10 (diez) Días Hábiles a partir de la recepción de la notificación de cobro para reponer la carta de crédito al monto vigente en el momento inmediatamente anterior al cobro efectuado por la Comisión”.¹³³ [énfasis de la Demandada]

227. Afirma la Demandada que *la ejecución de la Carta de Crédito HSBC se realizó conforme al Contrato* y, al respecto, refiere que al emitir el CAP el 26 de marzo de 2019 las Partes formalizaron el Acta de Aceptación Provisional, donde enlistaron 586 Deficiencias Menores (DM’s) que Empalme debía atender y corregir dentro de los 60 días siguientes, así como un total de 247 Reclamos de Garantía (RG’s) identificados durante el Período de Garantía que “... iniciaba el 2 de julio de 2018 feneciendo el 2 de julio de 2019, que el Contratista debía reparar o reemplazar y que de conformidad con la cláusula 20.4 ‘Ampliación del Período de Garantía’ debía de garantizar el Contratista un año después de su atención”. Mismos que, según asevera y explica la Demandada, no fueron atendidos por la Demandante y por ello CFE “... tuvo a bien ejecutar la Carta de Crédito HSBC el día 12 de marzo de 2020 por un monto de \$13’627,892.00 USD ... [y] ... Siguiendo esa tesitura, la Comisión hace valer que contaba con el derecho de hacer efectivo el Cobro de la Garantía de Cumplimiento (Carta de Crédito HSBC) ... así como la solicitud de reponer” el importe ejecutado de dicha garantía.¹³⁴
228. Aclara la Demandada, refiriéndose a la Carta de Crédito Banorte y a la Garantía Operativa, que existieron 247 Reclamos de Garantía durante el Período de Garantía (2 de julio de 2018 a 2 de julio de 2019); que Empalme tenía que reparar o reemplazar, además de garantizarlos por un año mediante la ampliación de la Garantía Operativa o con otra carta de crédito que amparara el monto de dicha afectación de conformidad con la Cláusula 20.4 del Contrato; y la Demandante no hizo nada de ello.
229. Añade la Demandada que, aun cuando la Demandante manifiesta en su Memorial de Demanda que ofreció a CFE una ampliación de la Carta de Crédito Banorte, y CFE se negó, Empalme omite señalar que el costo de la ampliación sería cubierto por la Demandada; y esta última, además de considerarlo excesivo, lo consideró contrario a las disposiciones de la Cláusulas Cuarta del Quinto Convenio Modificatorio y 3.6 (*sic*)¹³⁵ del Acuerdo entre las Partes sobre la Aplicación de la Cláusula 25.5 del Contrato, así como a las Cláusulas 11.2, 20.1 y 20.4 del Contrato; particularmente, porque CFE no solicitó a Empalme que ampliara por un año la Carta de Crédito Banorte (Garantía Operativa), sino que la ampliara solo por los 247 Reclamos de Garantía o entregara otra carta de crédito que los amparase, conforme a la

¹³³ Contestación a la Demanda, ¶¶ 151 y 152.

¹³⁴ Contestación a la Demanda, ¶¶ 153 a 162.

¹³⁵ Debería decir “3.4”.

Cláusula 20.4 del Contrato.¹³⁶

230. Aduce la Demandada, en virtud de lo anterior, que “[d]erivado de los incumplimientos y la negativa por parte de la Demandante en no renovar la Garantía Operativa o en la entrega de otra Carta de Crédito que cubriera sus obligaciones relacionadas con los 247 RG surgidos durante el Período de Garantía contempladas en las cláusulas 20.1 y 20.4 del Contrato, así como la poca atención a las DM’s ... la Comisión en estricto apego a lo indicado en el inciso iv) de la cláusula 11.3, contaba con el derecho de hacer efectiva la Garantía de Cumplimiento (Carta de Crédito HSBC) por los incumplimientos en la no atención de las DM’s y RG, así como en la no entrega de una Carta de Crédito que ampare los 247 RG”.¹³⁷

Análisis del Tribunal Arbitral

231. Según se desprende de todo lo anterior, para la realización del Proyecto objeto del Contrato, que estuvo a cargo de Empalme, esta última contrajo las diversas obligaciones que se especifican en el Contrato, cuya vigencia está referida a una temporalidad determinada o determinable (Período de Garantía), y se distinguen bajo los rubros denominados “Garantía de Cumplimiento” y “Garantía Operativa”, tanto genérica como conjuntamente referidos como “Garantías”, cuyo alcance está sujeto a los términos y condiciones que en cada caso se especifican en el Contrato y cuyo cumplimiento la Demandante se obligó a garantizar mediante dos instrumentos equivalentes, consistentes en sendas cartas de crédito *standby*, irrevocables ambas, que se materializaron mediante la “Carta de Crédito HSBC” y la “Carta de Crédito Banorte”, que respectivamente respaldan la Garantía de Cumplimiento y la Garantía Operativa.
232. La Garantía de Cumplimiento, respaldada por la Carta de Crédito HSBC, de conformidad con la Cláusula 11.1a) del Contrato tiene por objeto “*el debido, propio y absoluto cumplimiento por parte del Contratista de todas sus obligaciones derivadas del [presente] Contrato distintas a sus obligaciones establecidas en la Cláusula 20.2*”; es decir, *todas* las obligaciones de Empalme, *excepto* las relativas al cumplimiento de los Valores Garantizados (que se precisan bajo ese rubro en la Cláusula 1.1 del Contrato y en su Anexo 13). El cumplimiento de dichos Valores, “*se determinará durante las Pruebas de Desempeño*” ahí definidas. Asimismo, el alcance de dicha Cláusula 20.2 *excluye* expresamente el FDEAG (“Factor de Disponibilidad Equivalente Anual Garantizado”), cuya determinación tiene sus propias reglas; su cumplimiento forma parte de la Garantía Operativa.
233. La Garantía Operativa, a su vez, quedó respaldada por la Carta de Crédito Banorte y, de conformidad con la Cláusula 11.1b) del Contrato tiene por objeto “*el debido, propio y*

¹³⁶ Contestación a la Demanda, ¶¶ 163 a 173.

¹³⁷ Contestación a la Demanda, ¶ 174.

absoluto cumplimiento por parte del Contratista de todas sus obligaciones derivadas del [presente] Contrato de acuerdo a la Cláusula 20". Conforme a lo anterior, *todas* las obligaciones de Empalme que no forman parte de la Garantía de Cumplimiento, quedan cubiertas por la Garantía Operativa; es decir, no a la inversa, como pretende la Demandada que suceda en la especie.

234. El Período de Garantía, que constituye el ámbito temporal de vigencia de las Garantías, está definido bajo ese rubro en la Cláusula 1.1 del Contrato y *“significa en relación, con el Proyecto, el periodo que comienza en la Fecha de Aceptación Provisional de la Central [26 de marzo de 2019] y que termina en lo que ocurra primero: (i) el primer aniversario de la Fecha de Aceptación Provisional [26 de marzo de 2020] correspondiente a la Central; o (ii) la fecha determinada de conformidad con la Cláusula 20.4”*.
235. Siendo que lo primero en ocurrir podría haber sido el primer aniversario de la Fecha de Aceptación Provisional -conforme a lo cual el Período de Garantía respectivo habría concluido el 26 de marzo de 2020- resta determinar si bajo el supuesto de dicha cláusula 20.4 el Período de Garantía quedó *ampliado automáticamente* con anterioridad al primer aniversario de la Fecha de Aceptación Provisional.
236. La posibilidad de que el Período de Garantía se considere concluido en *la fecha determinada de conformidad con la Cláusula 20.4* (“Ampliación del Período de Garantía”), tiene su propia problemática según se desprende de los posicionamientos de ambas Partes.
237. En efecto, en virtud de que en los términos de dicha Cláusula 20.4 *“Si la Central no puede generar energía eléctrica debido a un Defecto o Desperfecto, el Período de Garantía aplicable será ampliado automáticamente¹³⁸ por un periodo igual al tiempo durante el cual la Central, o la parte correspondiente, no puedan ser utilizadas por la Comisión”*.
238. De los términos de esta parte de la Cláusula 20.4, se desprenden dos premisas como presupuestos para que opere la ampliación *automática* del Período de Garantía; siendo la primera, que la Central *no pueda generar energía eléctrica*; y, la segunda, que tal *incapacidad para generar energía eléctrica*, haya tenido como causa un *Defecto* o un *Desperfecto*. Por lo que respecta a esta primera premisa, el Tribunal Arbitral no ha advertido la existencia de reclamos específicos sobre alguna *incapacidad de la Central para generar energía eléctrica*.
239. Asimismo, considerando que conforme a la Cláusula 20.4 del Contrato, si las Deficiencias Menores que fueron identificadas y constan en el Acta de Aceptación, *“no afectan negativamente la seguridad, confiabilidad y operación de la Central, las mismas no necesitarán ser corregidas como condición para la emisión del Certificado de Aceptación*

¹³⁸ Énfasis añadido por el Tribunal Arbitral.

Provisional (y este certificado fue emitido el 26 de marzo de 2019), cabe inferir que las Deficiencias Menores especificadas en el CAP no ocasionaron que *la Central no pudiera generar energía eléctrica debido a un Defecto o Desperfecto* (según se definen ambos términos en la Cláusula 1.1 del Contrato), además de que el Tribunal Arbitral no constató que la Demandada haya manifestado y acreditado la existencia de una afectación de esa naturaleza.

240. Consecuentemente, no obstante que en la misma Cláusula 20.4 se estipula que “*Además, el buen funcionamiento del Equipo Principal o de los Materiales que deban ser reparados o reemplazados durante el Período de Garantía, así como su carencia de Defectos o Desperfectos, quedará garantizado por el Contratista por el término de 1 (un) año a partir de la reparación o reemplazo de que se trate al quedar libre de Defecto y/o Desperfectos*”, el Tribunal Arbitral considera que esta última Garantía de un año no está cubierta por la Carta de Crédito Banorte, en virtud de haber transcurrido su “Fecha de Terminación”, y tampoco por la Carta de Crédito HSBC, por razón de materia, toda vez que esta última únicamente respalda la Garantía de Cumplimiento establecida conforme a las Cláusulas 11.1.a) y 20.2 del Contrato.
241. Además de haber expirado el Período de Garantía conforme a lo antes determinado, el Tribunal Arbitral no constató la procedencia de la aseveración de la Demandada en el sentido de que, de conformidad con la última parte de dicha Cláusula 20.4, la Comisión haya ejercido *el derecho de pedirle al Contratista y este la obligación de entregar, una carta de crédito en un monto razonable y suficiente para asegurar el cumplimiento de la garantía de buen funcionamiento y ausencia de Defectos y Desperfectos del Equipo Principal o de los Materiales que deban ser reparados o reemplazados durante el Período de Garantía*”.
242. Asimismo, aun cuando la Demandada afirma enfáticamente haber ejercido ese derecho y haber solicitado a Empalme que ampliara por un año la *Carta de Crédito Banorte* únicamente por los 247 Reclamos de Garantía pendientes o entregara otra carta de crédito que los amparase, la realidad es que CFE no precisa en su memorial dato alguno respecto del documento con que pudiera demostrarlo; y en todo caso, la cuestión relevante es que, como antes se dijo, la Carta de Crédito HSBC, que fue ejecutada por la Demandada, no garantiza las obligaciones a que se refiere la Cláusula 20.4 del Contrato.
243. En efecto, de esta última disposición contractual se desprende, sin lugar a duda y como de hecho lo reconoce la Demandada, que la referida *garantía de buen funcionamiento* a que se refiere la Demandada dejó de estar respaldada por la Carta de Crédito Banorte y nunca fue garantizada mediante la Carta de Crédito HSBC; y dicha garantía, para ser respaldada, habría requerido de la emisión de una carta de crédito distinta.

244. Finalmente, lo que es un hecho irrefutable por estar así consignado expresamente¹³⁹, además de ser determinante para efectos de la controversia, es que la Demandada ejecutó la Carta de Crédito HSBC sin que tal ejecución hubiera sido procedente en virtud de todas las consideraciones anteriores y de los términos expresos del Contrato; razón por la cual, el Tribunal determina que la ejecución de dicha Carta de Crédito fue violatoria del Contrato y, por tanto, procede que el monto por el que indebidamente fue ejecutada, es decir la cantidad de USD \$13'627,892.00¹⁴⁰ (trece millones seiscientos veintisiete mil ochocientos noventa y dos dólares 00/100) moneda de los Estados Unidos de América, sea reintegrado o reembolsado a Empalme.
245. La violación contractual antes comentada reviste una especial gravedad, tomando en cuenta la circunstancia de que la actuación de la Demandada fue claramente deliberada al tener esta un conocimiento pleno del alcance de la Garantía de Cumplimiento conforme al Contrato, así como del objeto específico de la Carta de Crédito HSBC, además de ser sabedora de que, por ser este instrumento una carta de crédito *standby*, regida por ISP98¹⁴¹, por la naturaleza de este instrumento el banco emisor procedería sin más al pago de la cantidad objeto del requerimiento de pago que le hiciese CFE, sin cuestionar la procedencia del mismo.
246. En este contexto, en virtud de la notoria improcedencia de la ejecución de la Carta de Crédito HSBC, así como de las circunstancias a que se hace referencia en el párrafo anterior, el Tribunal Arbitral podría haber considerado, *prima facie*, que el monto total por el que la Demandada ejecutó la Carta de Crédito HSBC, es decir la cantidad de “USD \$13'627,892.00”¹⁴² (trece millones seiscientos veintisiete mil ochocientos noventa y dos dólares 00/100) moneda de los Estados Unidos de América, constituyó un exceso por parte de la Demandada.
247. Empero, el Tribunal Arbitral también tiene presente que la Demandante manifestó expresamente que “[d]espués de un análisis exhaustivo respecto de las Deficiencias Menores y Reclamos de Garantía, el Dictamen GPS I concluye que, Empalme únicamente sería responsable respecto de 58 Deficiencias Menores y 6 Reclamos de Garantía, los cuales fueron identificados y detallados previamente ... [y] de manera conjunta tienen un valor de USD \$1'040,512.56”. Asimismo, después de cuestionar la conducta de la Demandada en la ejecución de la Carta de Crédito HSBC, Empalme manifestó expresamente que “[e]l monto de USD \$1'040,512.56, deberá ser aplicado a la Carta de Crédito HSBC y, con ello debe

¹³⁹ Oficio de CFE No. 7B/2020/RJMN-00140, Anexo A-022 al Memorial de Demanda y Anexo D-040 al Escrito de Contestación a la Demanda. En este oficio, se cita el oficio No. DCIPI/CFFE/062/2020, mediante el cual CFE “requirió el cobro de dicha Garantía por un monto de USD \$13'627,892.00 (Trece millones seiscientos veintisiete mil ochocientos noventa y dos dólares)”, no exhibido por ninguna de las Partes.

¹⁴⁰ Cifra en la que coinciden ambas Partes, en cuanto al monto por el que fue ejecutada la Carta de Crédito HSBC.

¹⁴¹ Usos internacionales relativos a los créditos contingentes ISP98.

¹⁴² Monto del “Importe Ejecutado” de la Carta de Crédito HSBC, Anexos A-010 y A-011 del Memorial de Demanda.

*considerarse que la ejecución de la garantía en comento únicamente resultó procedente por la suma de USD \$12'638,574.89 (sic)", agregando que "...CFE se encuentra obligada a liquidar en favor de EMPALME la suma de USD \$ 12'638,574.89, monto que resulta de restar a la totalidad de la cantidad ejecutada de la Carta de Crédito HSBC, el monto total de Deficiencias Menores y Reclamos de Garantías efectivamente responsabilidad de EMPALME y sumando las respectivas comisiones que también fueron cargadas a EMPALME."*¹⁴³

248. Íntimamente relacionado con lo anterior se encuentran los costos asociados en que incurrió la Demandante con motivo de la ejecución por la Demandada de la Carta de Crédito HSBC, que la Demandante señala ascienden a USD \$51,195.45 dólares, correspondientes a USD \$37,762.14 dólares (por concepto de comisión que fue liquidada a la institución financiera emisora), y USD \$13,433.31 dólares (correspondientes a los respectivos gastos SWIFT incurridos),¹⁴⁴ montos que han sido confirmados por el perito GPS en su Dictamen.¹⁴⁵ En la medida en que la ejecución de la Carta de Crédito HSBC fue indebida, el Tribunal resuelve que la Demandada debe reembolsar a la Demandante dichas cantidades.
249. Existen otros montos que la Demandante ha reclamado derivado de la ejecución de la Carta de Crédito HSBC, que incluyen traducciones de dictámenes periciales, y los costos de avales de empresas relacionadas.¹⁴⁶ En relación a los primeros (que ascienden a \$215,074.65 pesos M.N.), el Tribunal estima que deben ser justificados, en todo caso, como costos del arbitraje, en tanto que respecto a los segundos (por un total de USD \$1,692,506.43 dólares), el Tribunal los rechaza pues constituyen un costo financiero indirecto por participar en el Contrato con el respaldo financiero de empresas relacionadas.¹⁴⁷
250. Toda vez que las diversas cuestiones anteriores, relativas específicamente a la ejecución de la Carta de Crédito HSBC, son independientes de todo lo debatido por las Partes en relación con las diversas Deficiencias Menores y Reclamos de Garantía, así como con la procedencia, atención y cumplimiento de los mismos, y los efectos que de todo ello deben derivar para las Partes, el Tribunal Arbitral no se pronuncia en este momento en relación con estas cuestiones, a cuyo análisis se procede a continuación.

¹⁴³ Memorial de Demanda, ¶¶ 980 a 983.

¹⁴⁴ Memorial de Demanda, ¶ 984.

¹⁴⁵ Ver Dictamen GPS I, ¶¶ 43 y 406.

¹⁴⁶ Memorial de Cierre Empalme, ¶ 122, e) (*Otros costos incurridos por la indebida ejecución de la Carta de Crédito HSBC, el Arbitraje de Emergencia y el Arbitraje*)

¹⁴⁷ Los costos sometidos a consideración del Tribunal expresan avales de garantía de cumplimiento de OHL Industrial, S.L. y Sener, Ingeniería y Sistemas, S.A., e intereses devengados, pero no pagados. Ver, Memorial de Cierre Empalme, ¶ 122, e) ii).

Atención de las Deficiencias Menores

Antecedentes

251. La Cláusula 1.1 del Contrato (Definiciones) al referirse a las Deficiencias Menores (o “DMs”) dispone que este concepto “... *tendrá el significado indicado en la Cláusula 18.4 del Contrato*”, conforme a la cual se consideran como tales aquellas que “... *no afectan negativamente la seguridad, confiabilidad y operación de la Central...*”, sin que sea necesario corregirlas como condición para la emisión del Certificado de Aceptación Provisional; empero, las DMs deben ser corregidas o completadas para cumplir con las Especificaciones del Contrato dentro de los 60 días siguientes a la emisión del Certificado de Aceptación Provisional.
252. Asimismo, conforme a los términos de dicha cláusula, en caso de que Empalme se demore injustificadamente en efectuar las correcciones CFE “... *podrá efectuarlas por si o a través de un tercero y el costo será cubierto ya sea por [Empalme] o bien mediante el ejercicio de la Garantía de Cumplimiento y/o de la Garantía Operativa*”.
253. La Aceptación Provisional de la Central está prevista en la Cláusula 18.1 del Contrato, que asimismo establece los términos y condiciones para la emisión del Certificado de Aceptación Provisional de la Central. Dicha aceptación fue diferida en diversas ocasiones por la imposibilidad de realizar las Pruebas de Desempeño a que se refiere la Cláusula 17.3 del Contrato –por causas ajenas al Contratista– como reconoció CFE en el Quinto Convenio Modificatorio.¹⁴⁸
254. De conformidad con la Cláusula 18.1 del Contrato y las Cláusulas Tercera y Cuarta del Quinto Convenio Modificatorio, el 26 de marzo de 2019 se emitió el Certificado de Aceptación Provisional y en la misma fecha se formalizó el Acta de Aceptación Provisional, que suscribieron ambas partes¹⁴⁹, a la que se adjuntó como Anexo 9 un listado de Deficiencias Menores, en el que se relacionan 586 DMs, agrupadas bajo tres rubros principales, que son (i) Ingeniería, (ii) Construcción y (iii) Puesta en Servicio o Puesta en Marcha¹⁵⁰. Evidentemente a esa fecha, tomando como punto de partida el Acta de Aceptación Provisional citada, se deben considerar como “pendientes” o “abiertas” las 586 Deficiencias Menores que consigna el Anexo 9 del Acta.

¹⁴⁸ Quinto Convenio Modificatorio, Anexo A-008 al Memorial de Demanda.

¹⁴⁹ Anexos A-009 al Memorial de Demanda y A-109 al Memorial Pre-Audiencia Empalme, respectivamente.

¹⁵⁰ Anexo 30 a Dictamen Pericial Ing. Cámara Anzures, presentado por la Demandada como Anexo DP-001 a su Contestación a la Demanda.

Posición de Empalme

255. La Demandante hace un análisis detallado de las Deficiencias Menores con base en el Reporte GPS I y sus respectivos anexos, concretamente el Apéndice 8 del mismo (Análisis de Deficiencias Menores).
256. En el Reporte GPS I, el perito indica que a la elaboración de su informe todavía existían Deficiencias Menores por cerrar y resolver, que muestra con corte al 14 de enero de 2021 en la Tabla 9 que se reproduce a continuación, un resumen de dichas DMs y el estado en que se encontraban, de acuerdo con la información disponible y los análisis hechos por GPS¹⁵¹.

Tabla 9. Estado de Deficiencias Menores al 14 de enero de 2021

RESPONSABLE	Cerrada	Cancelada	Repetida	En controversia	En proceso	Solicitud de cierre enviada	Abierta	Total general	%
INGENIERÍA	63		1	3	5	7		79	13.48%
CONSTRUCCIÓN	240			5	2	1	1	249	42.49%
PUESTA EN MARCHA	138	2	8	65	31	3	1	248	42.32%
PUESTA EN MARCHA & CONSTRUCCION	2			2	1			5	0.85%
SIEMENS						5		5	0.85%
TOTAL GENERAL	443	2	9	75	39	16	2	586	100.00%
%	75.6 %	0.3 %	1.5 %	12.8 %	6.7 %	2.7 %	0.3 %	100.0 %	

257. Según explica el perito, el significado de cada campo de las columnas de la tabla anterior es el siguiente:

Cerrada:	DM Cerradas Mediante Oficio.
Cancelada:	DM Canceladas desde la firma del Certificado de Aceptación Provisional (CAP).
Repetida:	DM repetidas que no deben ser contabilizadas.
En controversia:	DM sin acuerdo entre las Partes.

¹⁵¹ Dictamen GPS I, ¶¶ 217 y 218, Anexo AP-001 al Memorial de Demanda.

En proceso: DM en proceso de atención por Empalme con Mano de Obra Asignada.

Enviada Solicitud de cierre: Solicitud de cierre remitida por Empalme, Pendiente de respuesta por parte de CFE.

Abierta: DM sin recursos asignados por falta de definición con CFE.

258. Para efectos de su propia argumentación y del análisis por parte del Tribunal Arbitral, la Demandante identifica cada una de las Deficiencias Menores con el prefijo “DM” y el número consecutivo con el que se enlistan en el Acta citada, y las clasifica en los siguientes cinco (5) rubros: (i) Abiertas; (ii) En Controversia; (iii) Repetidas; (iv) Cerradas; y (v) Ejecutadas por medio de la Carta de Crédito HSBC¹⁵². La Demandante expone una tabla en la que muestra el estado de cada una de dichas DMs al 14 de enero de 2021, según las conclusiones contenidas en el Reporte GPS I.

259. Conforme a la clasificación referida de la Demandante, el resumen de sus posiciones en relación con las DMs listadas en la citada Acta de Aceptación Provisional es el siguiente, omitiéndose la referencia al estado de cada DM, sobre lo cual argumenta la Demandante¹⁵³, en virtud de que dicho estado sufrió modificaciones durante el período de instrucción de la causa, e igualmente existieron posiciones contradictorias entre las Partes, según se desprende de sus respectivos memoriales, a los que adelante se hace referencia.

260. Deficiencias Menores Abiertas.

Con Solicitud de Cierre¹⁵⁴

DM 8, DM 24, DM 25, DM 26, DM 37, DM 38, DM 72, DM 146, DM 327, DM 328, DM 446, DM 1 Siemens, DM 2 Siemens, DM 3 Siemens, DM 4 Siemens y DM 5 Siemens.

261. La Demandante sostiene que *la mayoría de estas DMs se consideran cerradas por GPS y, las que se consideran abiertas, requieren respuesta de CFE y, por lo mismo, no pueden ser imputables a Empalme.*

En Proceso de Atención con Mano de Obra Asignada o en Proceso de Revisión para Atención¹⁵⁵

¹⁵² Memorial de Demanda, ¶¶ 229 y 230, Anexo AP-001 y Apéndice 8 a éste.

¹⁵³ Memorial de Demanda, ¶¶ 231 a 656.

¹⁵⁴ Memorial de Demanda, ¶¶ 231 a 281.

¹⁵⁵ Memorial de Demanda, ¶¶ 282 a 399.

DM 41, DM 42, DM 43, DM 44, DM 46, DM 295, DM 321, DM 325, DM 329, DM 338, DM 360, DM 364, DM 368, DM 385, DM 390, DM 399, DM 416, DM 433, DM 438, DM 445, DM 450, DM 457, DM 474, DM 477, DM 482, DM 487, DM 494, DM 502, DM 512, DM 517, DM 532, DM 535, DM 539, DM 547, DM 554, DM 558, DM 559, DM 560 y DM 571.

262. Respecto a este rubro, la Demandante sostiene que *la demora en la atención de aquellas DMs que GPS considera abiertas, es justificada por tratarse de cuestiones no atribuibles a Empalme, tales como DMs atendidas y enviadas a cierre, DMs sin respuesta de CFE a la solicitud de licencia para su atención, e imposibilidad de Empalme de pagar a proveedores para su atención, por falta de pago por parte de CFE.*

Sin Solicitud de Cierre¹⁵⁶

DM 322 y DM 371.

263. En el caso de estas dos DMs, la Demandante argumenta que, *aun cuando CFE las considera Abiertas, su atención requiere de Parada de la Planta y CFE no ha dado respuesta a las solicitudes de Empalme para tal efecto.*

264. Deficiencias Menores en Controversia¹⁵⁷

DM 35, DM 45, DM 49, DM 181, DM 192, DM 203, DM 204, DM 212, DM 324, DM 331*, DM 341, DM 349, DM 351, DM 352, DM 353, DM 356, DM 358, DM 365, DM 375, DM 377, DM 387, DM 391, DM 392, DM 429, DM 431, DM 432, DM 434, DM 436, DM 437, DM 440, DM 442, DM 444, DM 448, DM 453, DM 454, DM 455, DM 456, DM 458, DM 459, DM 460, DM 462, DM 463, DM 464, DM 465, DM 466, DM 467, DM 468, DM 469, DM 472, DM 475, DM 476, DM 484, DM 485, DM 489, DM 490, DM 493, DM 507, DM 509, DM 513, DM 514, DM 515, DM 541, DM 542, DM 550, DM 551, DM 555, DM 556, DM 557, DM 561, DM 562, DM 563, DM 564, DM 570, DM 572 y DM 575.

* Esta DM, por su relevancia, será materia de análisis especial.

265. De nuevo, la Demandante sostiene que *la demora en la atención de aquellas DMs que GPS considera abiertas, es justificada por tratarse de cuestiones no atribuibles a Empalme, y en este grupo de deficiencias se trata de DMs atendidas y enviadas a cierre, inexistencia de elementos técnicos que justifiquen su realización, e imposibilidad de*

¹⁵⁶ Memorial de Demanda, ¶¶ 400 a 404.

¹⁵⁷ Memorial de Demanda, ¶¶ 405 a 631.

*Empalme de pagar a proveedores para su atención, por falta de pago por parte de CFE.*¹⁵⁸

266. Deficiencias Menores Repetidas¹⁵⁹

DMs 51 y 502; DMs 330, 343 y 358; DMs 333 y 353; DMs 342 y 512; DMs 329 y 345; DMs 27 y 406; DMs 21 y 473; y, DMs 54 y 492.

267. Conforme a las manifestaciones que en cada caso formula la Demandante, deben considerarse Cerradas las DMs 51, 330 y 343, 333, 342, 345, 406, 473 y 492; y cada una de las DMs 202, 358, 353, 512, 329, 27, 21 y 54, debe seguir siendo considerada como Deficiencia Menor.

268. Deficiencias Menores Cerradas y Canceladas¹⁶⁰

DMs 1 a 7; DMs 9 a 23; DMs 27 a 34; DM 36, 39 y 40; DMs 47 y 48; DM 50; DMs 52 a 71; DMs 73 a 145; DMs 147 a 180; DMs 182 a 191; DMs 193 a 202; DMs 205 a 211; DMs 213 a 294; DMs 296 a 320; DMs 323 y 326; DM, 332; 334 y 335; DMs 339 y 340; DM 344; DMs 346 a 348; DMs 350, 354, 355, 357 y 359; DMs 361 a 363; DMs 366, 367, 369 y 370; DMs 372 a 374; DM 376; DMs 378 a 384; DMs 386, 388 y 389; DMs 400 a 405; DMs 407 a 428; DMs 430, 435, 439, 441, 443, 447 y 449; DMs 451 y 452; DM 461; DMs 470 y 471; DMs 478 a 481; DMs 495 a 501; DMs 503 a 506; DMs 508, 510, 511 y 516; DMs 518 a 531; DMs 533, 534, 536, 537, 538 y 540; DMs 543 a 546; DMs 548, 549, 552 y 553; DMs 565 a 569; DMs 573 y 574; DMs 576 a 580; y, 1 Otro.*

* "Adicionalmente, existen dos DMs que fueron canceladas desde la fecha de Aceptación Provisional, al encontrarse atendidas las mismas. Estas DM son los números 336 y 337".

269. La Demandante sostiene que las DMs anteriores *fueron atendidas por Empalme y CFE manifestó su conformidad con los trabajos realizados, por lo que consecuentemente las mismas no son objeto de análisis en cuanto al alcance de los trabajos realizados*. La Demandante proporciona una relación en la que señala el número y fecha del oficio que según manifiesta evidencia el cierre de cada una de dichas DMs.¹⁶¹

¹⁵⁸ Memorial de Demanda, ¶ 631.

¹⁵⁹ Memorial de Demanda, ¶¶ 632 a 648.

¹⁶⁰ Memorial de Demanda, ¶¶ 649 y 650.

¹⁶¹ Memorial de Demanda, ¶ 649.

270. Deficiencias Menores ejecutadas bajo la Carta de Crédito HSBC¹⁶²

DMs 119, 146, 181, 192, 203, 204, 208 y 212; DMs 294 y 295; DMs 322, 342, 330, 331, 341, 342, 343 y 349; DMs 351 a 353; DMs 356, 358, 368, 371, 375, 377, 385, 387, 392 y 399; DMs 429, 431 a 434, 436, 437, 438, 442, 444, 446, 448 y 450; DMs 453 a 460; DMs 462 a 469; DMs 474 a 476; DMs 482 a 485; DMs 487, 489, 490, 492, 493 y 494; DMs 507, 509, 512 a 515, 517, 535, 541, 542, 547, 550 y 551; DMs 554 a 564; DMs 570, 571, 572 y 575; y, 01, 04 y 05 Siemens.

271. En relación con este concepto, Empalme presenta una tabla en la que, según manifiesta, *hace una relación de las DMs que CFE dijo haber ejecutado bajo la Carta de Crédito HSBC, de conformidad con su oficio enviado el 2 de abril de 2020*. La Demandante también agrega que, *si bien CFE nunca tuvo derecho a ejecutar la Carta de Crédito HSBC, mucho menos lo tenía para ejecutar 103 DMs de las que 71 ya habían sido atendidas, según se desprende del Reporte GPS I*¹⁶³.

272. La Demandante presenta una tabla que contiene una valoración descriptiva de 46 Deficiencias Menores Abiertas según las conclusiones de GPS¹⁶⁴, que se describen y muestran en el Apéndice 11 del Dictamen GPS I, que suman un total de \$4'562,434.60 M.N. y USD \$836,543.65 dólares y se identifican a continuación, sin incluir dicha tabla.

DM 8, DMs 42 y 43, DMs 45 y 46, DM49, DM 146, DM 204, DMs 321 y 322, DMs 324 y 325, DM 338, DMs 352 y 353, DM 358, DM 360, DM 364, DM 371, DM 390, DM 399, DM 416, DM 434, DMs 436 y 437, DM 448, DM 453, DM 455, DM 457, DM 466, DM 467, DMs 474 y 475, DM 477, DM 487, DM 494, DM 502, DM 512, DM 517, DM 532, DM 535, DM 554, DM 556, DMs 558 y 559.

273. La Demandante también presenta una tabla en la que se muestran ciertas Deficiencias Menores que *GPS determinó que se encuentran Abiertas y de las cuales Empalme es responsable, pero [según pretende] no deberá incurrir en costo alguno para su atención*, por las razones que se indican en dicha tabla, que a continuación se inserta para considerar la argumentación de la Demandante¹⁶⁵.

¹⁶² Memorial de Demanda, ¶¶ 651 y 652.

¹⁶³ Memorial de Demanda, ¶¶ 650 a 652 y oficio número 7B/2020/RJMN-00140, Anexo A-022 de dicho Memorial.

¹⁶⁴ Memorial de Demanda, ¶ 653 y Dictamen GPS I, Anexo AP-001 de dicho Memorial.

¹⁶⁵ Memorial de Demanda, ¶ 654 y Dictamen GPS I, Anexo AP-001 de dicho Memorial.

Número de DM	Concepto	Razonamiento de GPS
41	<i>“En la falla de los servidores de las TG’s se detecto que los sistemas de control de las TG’s no se operan desde el DCS, se verificará "La integración al DCS del sistema de control de las unidades turbogas y Turbina de Vapor, de tal forma que la operación y supervisión se realice a través de las estaciones de operación del DCS, sin embargo se cuenta con el control de carga de las unidades desde el SCD.”</i>	Los costos están incluidos en el valor de la DM 457.
445	<i>“Concluir la revisión de pantallas (gráficos) del DCS y descripciones en español, así como las pantallas de TV, TG's y equipos paquete en el Sistema de Control Distribuido DCS.”</i>	Los costos de la TV están incluidos en DM 466, mientras que los costos de las TG’s en la DM 457, por lo que esta DM no implica costo alguno.
458	<i>“Se solicita se entregue la evidencia de atención al oficio CSPPS/CCEI-322/2018, incidente derrateo de carga y disparo de las unidades TG1 y TG2.”</i>	No tiene costo, ya que no hubo una afectación en el equipo eléctrico. No existe documento específico entregado por Siemens sobre estas pruebas realizadas. Siemens indica que no ha habido señales de desperfectos posteriores.
560	<i>“SISTEMA DE MONITOREO DE EMISIONES CONTINUAS A LA ATMÓSFERA GVRC1 Y GVRC2: Se solicita la entrega del REPORTE POR PARTE DEL LABORATORIO PIA en su revisión final, así mismo se requiere verificar el sistema de adquisición de datos de los últimos dos meses de operación de la Central.”</i>	El último oficio con los comentarios atendidos en el cuerpo de los reportes no fue respondido por CFE. No tiene costo pues únicamente implica la entrega de un reporte.
571	<i>“Se solicita la entrega de los registros del protocolo de pruebas a los sistemas de control de las TG's (TG1 y TG2).”</i>	No tiene costo porque únicamente implica la entrega de registros.

274. La Demandante presenta además una tabla, que a continuación se inserta¹⁶⁶, en la que muestra 8 Deficiencias Menores por las que según pretende Empalme CFE le adeuda diversas cantidades por concepto de (i) valor descontado del precio del Contrato en la Aceptación

¹⁶⁶ Memorial de Demanda, ¶ 655 y Dictamen GPS I, Anexo AP-001 de dicho Memorial.

Provisional; (ii) DMs atendidas y ejecutadas en la Carta de Crédito HSBC; y (iii) trabajos adicionales y no previstos realizados respecto de esas DMs.

Número de DM	Concepto	Valoración	
		MXN	USD
26	<i>"Colocar caseta a los rectificadores de la protección catódica que se encuentran en la obra de toma. 7.3.4.10.5 características técnicas de protección catódica."</i>	\$128,000.00	-
35	<i>"En el calentador de gas y filtro de gas se tienen los transmisores montados sin gabinete, en paquete de calentador de gas, Se deberán instalar en gabinetes NEMA 4X"</i>	\$37,397.36	-
38	<i>"Se requiere corregir la instalación de conductímetro del pozo caliente que opere bajo las condiciones operativas correspondiente al proceso."</i>	\$31,104.00	-
375	<i>"Se requiere verificar el funcionamiento del modo Isla de las TG's en modo Ciclo Combinado operando una protección eléctrica de Planta."</i>	-	\$10,609.79
489	<i>"Verificar el funcionamiento de respuesta dinámica del 1%, 3% Y 5% de los GVRC's."</i>	-	\$9,298.47
490	<i>"Realizar la sintonización final del lazo de control de by pases de media presión."</i>	-	\$21,219.57
514	<i>"Verificar y comprobar que el HMI de la TV muestre valores de excentricidad de los diferentes rotores y verificar la escala gráfica y los valores de alarmas de la excentricidad de los tres rotores (ALTA, MEDIA Y BAJA) 10MAD10CY901, 10MAD20CY901, 10MAD30CY902, 10MAD40CY901."</i>	-	\$15,600.00
542	<i>"Se solicita verificar y comprobar que ya no se cuente con vibraciones en las válvulas de bypass de MP y BP"</i>	\$50,024.00	-
	Total:	\$246,525.36	USD \$56,727.83

275. La Demandante argumenta, en relación con las dos tablas precedentes [con corte al 14 de enero de 2021¹⁶⁷], que *al restar los montos adeudados por CFE a Empalme por la atención a*

¹⁶⁷ Dictamen GPS I, ¶¶ 217, Anexo AP-001 de Memorial de Demanda.

Deficiencias Menores, del monto estimado por la realización de las Deficiencias Menores consideradas como Abiertas por GPS, se llega al resultado que se muestra en la siguiente tabla¹⁶⁸.

	MXN	USD
Monto estimado de atención de DMs abiertas	\$4,562,434.60	\$836,543.65
Monto adeudado por CFE	\$246,525.36	\$56,727.83
Total	\$4,315,909.24	\$779,815.82

276. Posteriormente, a la luz de la Contestación a la Demanda, CFE controvierte la posición de Empalme en relación con cada una de las Deficiencias Menores¹⁶⁹ y a la luz del Dictamen Pericial Ing. Cámara Anzures¹⁷⁰ -perito de la Demandada, que según CFE confirma todas sus manifestaciones en relación con las DMs debatidas- la Demandante manifiesta en su Memorial Pre-Audiencia Empalme¹⁷¹ que “*el suscribir la Aceptación Provisional no le priva de la posibilidad de analizar y evaluar puntualmente cada una de las Dms para determinar la procedencia de su atención*”¹⁷².
277. Empalme manifiesta que para efectos de sintetizar los argumentos relacionados con cada DM, las agrupa en las siguientes categorías, y el estado de todas las DMs se puede consultar en el Anexo A-100¹⁷³, que se debe considerar actualizado al 25 de noviembre de 2021, que es la fecha del Análisis Técnico GPS DM, Apéndice No. 01 del Reporte GPS II¹⁷⁴, en el cual se apoya la Demandante para sustentar sus pretensiones.

- A.1. Cierre posterior.
- A.2. Deficiencias Menores relacionadas con pruebas.
- A.3. Deficiencias Menores relacionadas entre sí para cierre (repetidas).
- A.4. Deficiencias Menores Abiertas.
- A.5. Demás Deficiencias Menores en controversia y alegadas como Abiertas por CFE, y DM-331*.

¹⁶⁸ Memorial de Demanda, ¶ 656 y Dictamen GPS I, Anexo AP-001 de dicho Memorial.

¹⁶⁹ Contestación a la Demanda, ¶¶ 213 a 937.

¹⁷⁰ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001 de Contestación a la Demanda.

¹⁷¹ Memorial Pre-Audiencia Empalme, ¶ 91.

¹⁷² Contestación a la Demanda, ¶ 938.

¹⁷³ Memorial Pre-Audiencia Empalme, ¶¶ 92 a 114 y Anexo A-100 de dicho Memorial.

¹⁷⁴ Dictamen GPS II, Anexo AP-002 del Memorial Pre-Audiencia Empalme, y Apéndice No. 01 de dicho Dictamen.

* Esta DM, por su relevancia, será materia de análisis especial.

278. Cierre Posterior. La Demandante manifiesta que esta categoría incluye DMs que fueron atendidas por Empalme y fueron cerradas formalmente por CFE después de la presentación del Memorial de Demanda y de la Contestación a la Demanda, refiriéndose al Anexo A-100 para su identificación. Asimismo, la Demandante hace notar que Empalme ha seguido atendiendo DMs y las mismas no han sido rechazadas por CFE por supuestas demoras injustificadas¹⁷⁵. En el Anexo A-100, las DMs que aparecen listadas con el estatus de “cerrada por CFE” o “cierre posterior” de conformidad con CFE, son las siguientes:

DM- 43, DM-119, DM-208, DM-294, DM-295, DM-322. DM-324, DM-333, DMs 341 y 342, DM-356, DM-360, DM-385, DM-429, DM-432, DM-434, DM-442, DM-446, DM-454, DMs 458 y 459, DMs 463, 464 y 465, DMs 467, 468 y 469, DM-477, DM-482, DM-493, DM-507, DM-509, DM-512, DM-514, DM-539, DM-550, DM-551, DM-557, DM-560, DM-564, DM-570, DM-572, DM-575, y DMs 3, 4 y 5 Siemens.

279. Deficiencias Menores relacionadas con pruebas. La Demandante manifiesta que existen ciertas DMs relacionadas con las Pruebas Pendientes y, conforme a lo manifestado en la sección V del Memorial Pre-Audiencia Empalme, dicha Pruebas se deben tener como realizadas satisfactoriamente conforme al Quinto Convenio Modificatorio, por lo que las DMs relacionadas con las mismas deben considerarse como cerradas¹⁷⁶.

280. Asimismo, el perito de la Demandante manifiesta en su dictamen¹⁷⁷ que “... *GPS puede concluir que revisados los argumentos presentados por el perito de la CFE, el tiempo transcurrido entre el vencimiento de la Garantía Operativa [es decir el 2 de julio de 2019, como ha determinado el Tribunal Arbitral y no el 9 de junio de 2019, como pretende Empalme] y el reinicio de las pruebas, es imputable a la CFE y en consecuencia, al agotarse el plazo previsto en Quinto Convenio Modificatorio, las pruebas no ejecutadas no se pueden establecer como incumplimientos al Contrato por parte de EMPALME, teniendo en cuenta quedicho Convenio establece que una vez agotado el plazo, las pruebas faltantes se darían como terminadas satisfactoriamente*”.

281. Deficiencias Menores relacionadas entre sí para cierre (repetidas). En relación con esta categoría, la Demandante manifiesta su oposición a la realización de duplicidad de trabajos, y solicita que se consideren como cerradas aquellas DMs que hayan sido incluidas en otras DMs o RGs¹⁷⁸.

¹⁷⁵ Memorial Pre-Audiencia Empalme, ¶ 93.

¹⁷⁶ Memorial Pre-Audiencia Empalme, ¶ 94.

¹⁷⁷ Dictamen GPS II, Anexo AP-002 del Memorial Pre-Audiencia Empalme, ¶ 47.

¹⁷⁸ Memorial Pre-Audiencia Empalme, ¶¶ 95 y 96.

282. Considerando las Deficiencias Menores Repetidas que reclamó originalmente la Demandante en su Memorial de Demanda¹⁷⁹, en comparación con lo pretendido por la Demandada en su Contestación a la Demanda¹⁸⁰ con el apoyo de su perito¹⁸¹, así como las conclusiones del perito de la Demandante¹⁸², se puede concluir que el estado de las DMs reclamadas como Repetidas al 29 de noviembre de 2021 –fecha de los Memoriales Pre-Audiencia de las Partes– es el siguiente:

Según CFE

Deben considerarse Cerradas:	DM 202, DM 343, DM 342, DM 512, DM 406, DM 21, DM 473 y DM 54.
Deben considerarse Abiertas:	DM 51, DM 358, DM 333, DM 353, DM 329, DM 345, DM 27 y DM 492.

Según perito de CFE

Deben considerarse Cerradas:	DM 502, DM 330, DM 343, DM 358, DM 342, DM 512, DM 27, DM 406 y DM 54.
Deben considerarse Abiertas:	DM 51, DM 333, DM 353, DM 329, DM 345 y DM 492.

Según perito de Empalme

Deben considerarse Cerradas:	DM 51, DM 202, DM 330, DM 333, DM 342, DM 343, DM 358 y DM 492.
Deben considerarse Abiertas:	DM 345 y DM 512.

283. Deficiencias Menores Abiertas. Respecto a esta categoría de Deficiencias Menores, la Demandante manifiesta que aquéllas que considerarse como responsabilidad de Empalme y deben considerarse como Abiertas son las que se señalan en el Análisis Técnico contenido en el Apéndice 01 del Reporte GPS II y Empalme realizó sus mejores esfuerzos para atenderlas, para lo cual requería que CFE se lo comunicara con cuatro semanas de anticipación a la fecha en que estimara reunir las condiciones necesarias para su atención¹⁸³.

¹⁷⁹ Memorial de Demanda, ¶¶ 632 a 648.

¹⁸⁰ Contestación a la Demanda, ¶¶ 879 a 921.

¹⁸¹ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001 de Contestación a la Demanda.

¹⁸² Dictamen GPS II, Anexo AP-002 del Memorial Pre-Audiencia Empalme, y Apéndice No. 01 de dicho Reporte.

¹⁸³ Memorial Pre-Audiencia Empalme, ¶¶ 97 y 98 y Apéndice 1 del Dictamen GPS II, Anexo AP-002 de dicho Memorial.

284. La Demandante añade que “... en atención a que CFE había indicado que la Central estaría fuera de servicio ... Empalme indicó [a CFE] que para atender DMs con la Planta parada - cuya atención dependía del pago a proveedores- era necesario que CFE confirmara con antelación suficiente para evitar posibles interferencias con otros contratistas y subcontratistas”. Según aduce Empalme, con lo anterior pretendía enfatizar “...la necesidad de contar con los recursos para movilizar a los distintos proveedores... con el afán de cerrar la mayor cantidad de DMs posible y en un ejercicio de buena fe ofreció mediante correos electrónicos de marzo de 2020 pagar por la realización de las DMs pendientes para que CFE pudiera atender las mismas sin necesidad de avisar a Empalme con antelación respecto de la parada de planta.”¹⁸⁴
285. La Demandante manifiesta que las Deficiencias Menores que según el análisis técnico realizado por su perito en el Apéndice 01 del Reporte GPS II son responsabilidad de Empalme y deben considerarse como Abiertas, están valorizadas en la sección 10.1.1 de dicho Reporte y se muestran en la Tabla 10 (Resumen de la Estimación de DM Abiertas), que muestra, con las observaciones respectivas en el caso de cada DM, que el cálculo realizado por GPS para las Deficiencias Menores abiertas y descontadas es de USD 881,584.94 dólares, que Empalme debe reconocer a CFE.¹⁸⁵
286. Para llegar a la cifra anterior, el perito analizó la estimación de costos de las DMs, como se mencionó en el informe inicial de GPS¹⁸⁶ (donde se estimó originalmente un valor de USD 983,271.66), restando el valor de las DMs ejecutadas por Empalme en las que GPS consideró que Empalme no tenía responsabilidad en el cierre, y también descontó el costo asignado por CFE a las DMs que ya habían sido descontadas por CFE en los acuerdos establecidos y descontados para la Aceptación Provisional de la Planta.¹⁸⁷
287. Demás Deficiencias Menores en controversia y alegadas como Abiertas por CFE. La Demandante se limita a manifestar que “... considera que algunas de las DMs siguen Abiertas y si bien el análisis técnico de las mismas se encuentra en el Apéndice 01 del Dictamen GPS II... [en la sección A.5., correspondiente a esta categoría] se abordará de manera específica la **DM-331**, por su especial relevancia”¹⁸⁸. Por la misma razón, el Tribunal Arbitral analiza más adelante la DM-331 en un capítulo especial.
288. Como una conclusión general, aplicable a las Deficiencias Menores, cabe referirse a las manifestaciones finales de la Demandante, en las que Empalme sostiene que “... ha cumplido de manera continua con sus obligaciones en relación a la atención de DMs ... lo cual

¹⁸⁴ Memorial Pre-Audiencia Empalme, ¶¶ 99 a 101, y Anexo A-099 de dicho Memorial.

¹⁸⁵ Dictamen GPS II, ¶¶ 232 a 234 y Tabla 10 contenida en el mismo, Anexo AP-002 de Memorial Pre-Audiencia Empalme.

¹⁸⁶ Dictamen GPS I, ¶¶ 407 a 412 y Tabla 19 contenida en el mismo, Anexo AP-001 de Memorial de Demanda.

¹⁸⁷ Dictamen GPS II, ¶ 232, Anexo AP-002 de Memorial Pre-Audiencia Empalme.

¹⁸⁸ Memorial Pre-Audiencia Empalme, ¶ 102.

*demuestra la buena fe con la que se ha conducido frente a CFE... [y] ... reitera la forma en que catalogó las DMs*¹⁸⁹, refiriéndose para tal efecto a la Tabla que muestra el *estatus* de las DMs, que exhibió con su Memorial Pre-Audiencia¹⁹⁰.

289. De todo lo anterior, Empalme concluye, sustentando sus asertos en los análisis del perito GPS, que *de las 586 DMs que CFE presentó, sólo 78 están en controversia*.¹⁹¹

Posición de CFE

290. La Demandada respondió al planteamiento inicial de la Demandante, manifestando que *con corte al 9 de junio* [de 2021], es decir casi cuatro meses después de la presentación del Memorial de Demanda, *existía un total de 62 DMs que seguían sin atender por parte de la Demandante, y explicaría detalladamente el historial en la atención de las DMs que el Contratista no ha culminado de conformidad con la Clausula 18.4 del Contrato*. La Demandada comenta dichas Deficiencias Menores, respondiendo expresamente a las manifestaciones formuladas al respecto por la Demandante¹⁹².
291. Deficiencias Menores Abiertas con Solicitud de Cierre. La Demandada comenta detalladamente 16 Deficiencias Menores comprendidas bajo este rubro, así como el estado de cada una de ellas, que muestra en la siguiente tabla¹⁹³. Asimismo, en apoyo de sus aseveraciones, la Demandada exhibe los Anexos D-42 a D-71.

Tabla Resumen del Estado de las DMs

DMs	Conclusión GPS	Estado CFE	Observaciones CFE
8	Abierta	Cerrada	Atendida por el Contratista
24	Cerrada	Abierta	Pendiente de atención por el Contratista
25	Cerrada	Abierta	Pendiente de atención por el Contratista
26	Cerrada	Abierta	Pendiente de atención por el Contratista
37	Cerrada	Abierta	Pendiente de atención por el Contratista
38	Cerrada	Abierta	Pendiente de atención por el Contratista
72	Cerrada	Abierta	Pendiente de atención por el Contratista
146	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
327	Cerrada	Cerrada	Atendida por el Contratista
328	Cerrada	Cerrada	Atendida por el Contratista
446	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito

¹⁸⁹ Memorial de Cierre Empalme, ¶¶ 19 a 22.

¹⁹⁰ Anexo A-100 del Memorial Pre-Audiencia Empalme.

¹⁹¹ Memorial de Cierre Empalme, ¶ 23; Tabla estatus DMs, Anexo A-100; Dictamen GPS I Y Apéndices 08 y 11; Dictamen GPS II y Apéndice 01.

¹⁹² Contestación a la Demanda, ¶¶ 208 y 209.

¹⁹³ Contestación a la Demanda, ¶¶ 213 a 278 y Anexos D-42 a D-71.

DMs	Conclusión GPS	Estado CFE	Observaciones CFE
1 Siemens	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
2 Siemens	Cerrada	Cerrada	Atendida por el Contratista
3 Siemens	Cerrada	Abierta	Pendiente de atención por el Contratista
4 Siemens	Cerrada	Cerrada	Atendida por CFE con recursos propios
5 Siemens	Cerrada	Cerrada	Atendida por CFE con recursos propios

292. Deficiencias Menores en Proceso de Atención con Mano de Obra Asignada o en Proceso de Revisión para Atención. La Demandada comenta detalladamente 39 Deficiencias Menores comprendidas bajo este rubro, así como el estado de cada una de ellas, que muestra en la siguiente tabla. Asimismo, en apoyo de sus aseveraciones, la Demandada exhibe los Anexos D-72 a D-201¹⁹⁴.

Tabla Resumen del Estado de las DMs en Proceso de Atención

DMs	Conclusión GPS	Estado CFE	Observaciones
41	Abierta	Abierta	Pendiente de atención por el Contratista
42	Abierta	Abierta	Pendiente de atención por el Contratista
43	Abierta	Abierta	Pendiente de atención por el Contratista
44	Cerrada	Abierta	Pendiente de atención por el Contratista
46	Abierta	Cerrada	Atendida por el Contratista
295	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
321	Abierta	Abierta	Pendiente de atención por el Contratista
325	Abierta	Cerrada	Atendida por el Contratista
329	Abierta	Abierta	Pendiente de atención por el Contratista
338	Abierta	Abierta	Pendiente de atención por el Contratista
360	Abierta	Abierta	Pendiente de atención por el Contratista
364	Abierta	Cerrada	Atendida por el Contratista
368	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
385	Cerrada	Cerrada	Atendida por CFE con recursos propios
390	Abierta	Cerrada	Atendida por el Contratista
399	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
416	Abierta	Abierta	Pendiente de atención por el Contratista
433	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
438	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
445	Abierta	Abierta	Pendiente de atención por el Contratista
450	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención

¹⁹⁴ Contestación a la Demanda, ¶¶ 279 a 457 y Anexos D-72 a D-201.

DMs	Conclusión GPS	Estado CFE	Observaciones
457	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
474	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
477	Abierta	Abierta	Pendiente de atención por el Contratista
482	Cerrada	Cerrada	Atendida por CFE con recursos propios
487	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
494	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
502	Abierta	Cerrada	Atendida por el Contratista
512	Abierta	Cerrada	Atendida con recursos de la Carta de Crédito
517	Abierta	Abierta	En proceso de atención con recursos de la Carta de Crédito
532	Abierta	Abierta	Pendiente de atención por el Contratista
535	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
539	Cerrada	Abierta	Pendiente de atención por el Contratista
547	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
554	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
558	-----	Abierta	En proceso de atención con recursos de la Carta de Crédito
559	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
560	Abierta	Cerrada	Atendida con recursos de la Carta de Crédito
571	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención

293. Deficiencias Menores sin Solicitud de Cierre. La Demandada comenta sólo 2 Deficiencias Menores comprendidas bajo este rubro, y según lo manifestado por CFE su estado es el siguiente, sin que en este caso se haya incluido una tabla y sin haber sido exhibidos anexos¹⁹⁵.

DM-322 La Demandante manifiesta que *el estatus de esta DM conforme a CFE es **Abierta** con lo cual concuerda el análisis de GPS* [Reporte GPS I].

La Demandada manifiesta que *esta DM está **Cerrada** [en virtud de que] el Contratista irresponsablemente dejó su obligación a un lado sin causa justificable, por lo que CFE tuvo que impartir el curso objeto de la DM con simulador propio.*

¹⁹⁵ Contestación a la Demanda, ¶¶ 458 a 468.

DM-371 La Demandante manifiesta que *el estatus de esta DM conforme a CFE es **Abierta*** y manifiesta que *para su atención se requiere de una Parada de Planta y CFE no le ha dado aviso de ello*, añadiendo que *GPS concluye en su análisis [Reporte GPS I] que la DM no ha sido atendida en su totalidad por requerir Parada de la Planta y debe considerarse abierta.*

La Demandada manifiesta que *CFE no tiene la obligación de dar aviso al Contratista sobre los paros de la Central y es Empalme quien tiene la obligación de solicitar licencia a CFE para atender la DM. Añade la Demandada que mediante acta de 30 de mayo de 2019 la Central fue transferida a Empalme para ejecutar las Pruebas del Quinto Convenio Modificatorio [del Contrato] y atender las Deficiencias Menores, y el Contratista incumplió sus obligaciones.*

294. Deficiencias Menores en Controversia. La Demandada comenta detalladamente a lo largo de los párrafos 473 a 878 de su Escrito de Contestación a la Demanda las Deficiencias Menores comprendidas bajo este rubro, así como el estado de cada una de ellas, que muestra resumidamente en la siguiente tabla¹⁹⁶. Asimismo, en apoyo de sus aseveraciones, la Demandada exhibe los Anexos D-202 a D-528.

295. La DM 331, que forma parte de este rubro, por su relevancia será materia de análisis especial más adelante en este Laudo.

Tabla Resumen del Estado de las DMs en Controversia

DMs	Conclusión GPS	Estado CFE	Observaciones
35	-----	Abierta	Pendiente de atención por el Contratista
45	-----	Abierta	Pendiente de atención por el Contratista
49	-----	Abierta	Pendiente de atención por el Contratista
181	-----	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
192	-----	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
203	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
204	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
212	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
324	Abierta	Cerrada	Atendida con recursos de la Carta de Crédito
331	Cerrada	Abierta	Atendida con recursos de la Carta de Crédito (proceso cierre documental)
341	Cerrada	Cerrada	Atendida por CFE con recursos propios

¹⁹⁶ Contestación a la Demanda, ¶¶ 473 a 878 y Anexos D-202 a D-528.

DMs	Conclusión GPS	Estado CFE	Observaciones
349	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
351	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
352	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
353	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
356	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
358	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
365	Cerrada	Abierta	Pendiente de atención por el Contratista
375	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
377	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
387	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
391	Cerrada	Abierta	Pendiente de atención por el Contratista
392	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
429	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
431	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
432	Cerrada	Cerrada	Atendida por CFE con recursos propios
434	Abierta	Cerrada	Atendida con recursos de la Carta de Crédito
436	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
437	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
440	Cerrada	Abierta	Pendiente de atención por el Contratista
442	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
444	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
448	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
453	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
454	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
455	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
456	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
458	Abierta	Cerrada	Atendida por CFE con recursos propios
459	Cerrada	Cerrada	Atendida por CFE con recursos propios

DMs	Conclusión GPS	Estado CFE	Observaciones
460	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
462	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
463	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
464	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
465	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
466	Abierta	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
467	Abierta	Cerrada	Atendida con recursos de la Carta de Crédito
468	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
469	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
472	Cerrada	Abierta	Pendiente de atención por el Contratista
475	Abierta	Abierta	En proceso de atención con recursos de la Carta de Crédito
476	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
484	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
485	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
489	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
490	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
493	Cerrada	Cerrada	Atendida por CFE con recursos propios
507	Cerrada	Cerrada	Atendida por CFE con recursos propios
509	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
513	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
514	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
515	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
541	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
542	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
550	Cerrada	Cerrada	Atendida por CFE con recursos propios
551	Cerrada	Cerrada	Atendida por CFE con recursos propios
555	Cerrada	Abierta	Contemplada en Cobro Carta de Garantía y pendiente atención
556	Abierta	Abierta	En proceso de atención con recursos de la Carta de Crédito
557	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
561	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito

DMs	Conclusión GPS	Estado CFE	Observaciones
562	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
563	Cerrada	Abierta	En proceso de atención con recursos de la Carta de Crédito
564	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
570	Cerrada	Cerrada	Atendida con recursos de la Carta de Crédito
572	Cerrada	Cerrada	Atendida por CFE con recursos propios
575	-----	Cerrada	Atendida por CFE con recursos propios

296. Deficiencias Menores Repetidas. De nuevo, la Demandada comenta detalladamente las Deficiencias Menores comprendidas bajo este rubro, así como el estado de cada una de ellas; para lo cual la Demandada, en relación con cada grupo de DMs supuestamente repetidas, presenta el punto de vista manifestado por la Demandante, del que forma parte una tabla comparativa de las respectivas DMs; y a continuación, la Demandada presenta su respuesta¹⁹⁷. En el caso de las DMs relativas a este rubro, la Demandada únicamente exhibe el Anexo D-529, en relación con las DMs 51 y 202.

297. Se muestra a continuación el estado de cada una de las DMs que la Demandante reclamó como repetidas, conforme a lo manifestado por la Demandante en su Memorial de Demanda y por la Demandada en su Contestación a la Demanda.

DMs 51 y 202

La Demandante manifiesta que *ambas DMs tienen el mismo concepto y GPS en su análisis [Reporte GPS I] concluye que están repetidas, por lo cual la DM 51 debe considerarse **Cerrada** y la DM 202 debe considerarse como Deficiencia Menor.*

La Demandada manifiesta que *la DM 202 ha sido **Cerrada** y la DM debe considerarse como **Abierta**.*

DMs 330, 343 y 358

La Demandante manifiesta que *la DM 358 comprende los conceptos de las DMs 330 y 343, por lo que GPS concluye en su análisis [Reporte GPS I] que están repetidas y deben considerarse **Cerradas**, considerando solamente la DM 358 como Deficiencia Menor.*

La Demandada manifiesta que *la DM 358 está **Abierta** y en proceso de atención con recursos de la carta de crédito [Carta de Crédito HSBC] y una vez atendida la DM 358, se procedería al cierre de las DMs 330 y 343.*

DMs 333 y 353

La Demandante manifiesta que *la DM 353 incluye el concepto de la DM 333 y GPS en su*

¹⁹⁷ Contestación a la Demanda, ¶¶ 879 a 921y Anexo D-529.

*análisis [Reporte GPS I] concluye que la DM 333 está repetida, por lo cual la DM 333 debe considerarse **Cerrada** y la DM 353 debe considerarse como Deficiencia Menor.*

La Demandada informa que la DM 333 se encuentra **Abierta** y la DM 353 también se encuentra **Abierta**, contemplada en la carta de garantía [Carta de Crédito HSBC] y sin haber sido adjudicado el contrato para su atención, por lo que debe permanecer **Abierta**.

DMs 342 y 512

La Demandante manifiesta que *ambas DMs tienen el mismo concepto y GPS en su análisis [Reporte GPS I] concluye que están repetidas, por lo cual la DM 342 debe considerarse **Cerrada** y la DM 512 como Deficiencia Menor.*

La Demandada manifiesta que *las DMs 342 y 512 fueron atendidas con recursos de la carta de crédito [Carta de Crédito HSBC] y se encuentran **Cerradas**.*

DMs 329 y 345

La Demandante manifiesta que *la DM 329 abarca lo contenido en la DM 345 y GPS en su análisis [Reporte GPS I] concluye que la DM 345 está repetida, por lo cual la DM 345 debe considerarse **Cerrada** y la DM 329 como Deficiencia Menor.*

La Demandada manifiesta que *dichas DMs tienen alcances distintos, y la DM 345, que está **Abierta**, tiene un alcance mayor que la DM 329, misma que sólo se considerará **Cerrada** una vez que Empalme haya atendido la DM 345; razón por la cual, la Demandada informa que las DMs 329 y 345 se encuentran **Abiertas**.*

DMs 27 y 406

La Demandante manifiesta que *lo solicitado por CFE en la DM 406 se refleja igualmente en la DM 27, por lo cual GPS en su análisis [Reporte GPS I] concluye que la DM 406 está repetida, y debe considerarse **Cerrada** y la DM 27 como Deficiencia Menor.*

La Demandada informa que *las DMs 27 y 406 se encuentran **Cerradas**, atendidas por el Contratista.*

DMs 21 y 473

La Demandante manifiesta que *lo solicitado por CFE en la DM 473 se refleja igualmente en la DM 21, por lo cual GPS en su análisis [Reporte GPS I] concluye que la DM 473 está repetida, y debe considerarse **Cerrada** y la DM 21 como Deficiencia Menor.*

La Demandada informa que *las DMs 21 y 473 se encuentran **Cerradas**, atendidas por el Contratista.*

DMs 54 y 492

La Demandante manifiesta que *lo solicitado por CFE en la DM 492 se refleja igualmente en la DM 54, por lo cual GPS en su análisis [Reporte GPS I] concluye que la DM 492 está*

*repetida y debe considerarse **Cerrada** y solamente se debe considerar la DM 54 como Deficiencia Menor.*

*La Demandada informa que la DM 54 se encuentra **Cerrada** y la DM 492 se encuentra **Abierta**, contemplada en la carta de garantía [Carta de Crédito HSBC], sin que a la fecha [de la Contestación a la Demanda] hubiese sido adjudicado el contrato para su atención, por lo que debe permanecer **Abierta**.*

298. Deficiencias Cerradas y Canceladas

- a. Deficiencias cerradas en controversia respecto a lo indicado por el Contratista en los numerales No. 69 y No. 649 del Memorial de Demanda¹⁹⁸.

299. En relación con el inciso “a” de este rubro -además de hacer mención de que el Tribunal Arbitral no advirtió la existencia de un inciso “b”- es importante transcribir los numerales del Memorial de Demanda que cita la Demandada, a fin de estar en posibilidad de analizar su posición. Se transcriben a continuación ambos numerales.

“69. Incluso, EMPALME ha tenido conocimiento que CFE ejecutó conceptos que las Partes ya consideraban como “cerrados” y que, posterior a la ejecución, ha cerrado DMs ejecutadas bajo la Carta de Crédito HSBC. De manera ejemplificativa, tenemos el RG 13 que, no obstante haber sido previamente cerrado con la aprobación de CFE¹⁹⁹, fue materia de ejecución de la Carta de Crédito HSBC²⁰⁰. Asimismo, las DMs 119, 208 y 294 fueron cerradas por CFE posterior a la ejecución de la Carta de Crédito HSBC”.²⁰¹
[Énfasis añadido por el Tribunal Arbitral]

“649. Por otro lado, existen diversas DMs que fueron atendidas por EMPALME y sobre las cuales CFE manifestó su conformidad respecto de los trabajos realizados. Consecuentemente, las mismas no son objeto de análisis en cuanto al alcance de los trabajos realizados. Se proporciona a continuación una relación del número de dichas DMs, el oficio que evidencia su cierre y la fecha este último”.

300. La relación que se menciona en el párrafo 649 del Memorial de Demanda, como se mencionó al referirse a la posición de la Demandante, es sumamente extensa en virtud de que muestra las 580 Deficiencias Menores, más “1 Otro”, consistente en el oficio 742.160/JALV-072/20. Por esa razón, únicamente se señalan a continuación los datos correspondientes a las DMs 119, 208 y 294, a que se refiere el párrafo 69 arriba transcrito, sin insertar completa la tabla que los contiene.

¹⁹⁸ Contestación a la Demanda, ¶¶ 922 a 937.

¹⁹⁹ Oficio RO-CCEI-092-19 de fecha 25 de junio de 2019 (A-036).

²⁰⁰ Segunda versión del Anexo 1 del Oficio 7B/2020/RJMN-00140 (A-023).

²⁰¹ RO-CCEI-149/20 (A-046).

Número de DM	Oficio evidencia de cierre	Fecha de oficio de evidencia cierre
119	RO-CCEI-149/20	23 de noviembre de 2020
208	RO-CCEI-149/20	23 de noviembre de 2020
294	RO-CCEI-149/20	23 de noviembre de 2020

301. La Demandada manifiesta que *no es correcto lo manifestado por Empalme respecto a que las Deficiencias Menores indicadas en este apartado hayan sido atendidas por la Demandante, toda vez que fueron atendidas mediante recursos de la Carta de Crédito HSBC, en virtud del incumplimiento del Contratista.*²⁰²
302. En el caso de dichas DMs 119, 208 y 294, la Demandada se limita a referir como antecedente diversos comunicados entre CFE y Empalme, relacionados con la Deficiencia Menor respectiva, para indicar como conclusión en cada caso que: “... *la Comisión confirma que la deficiencia menor [119, 208 ó 294] se encuentra “CERRADA” con fecha 23 de noviembre de 2020, atendida mediante Contrato adjudicado con recursos del cobro de la Garantía del Cumplimiento*”²⁰³. [énfasis añadido por la Demandada]
303. En la siguiente actuación procesal, consistente en la presentación de los Memoriales Pre-Audiencia, la Demandada enfoca sus alegaciones en este tema sobre las DMs que abajo se especifican, que controvierte sustentándose en los documentos exhibidos por Empalme por requerimiento de la Demandada en la etapa de Solicitud de Documentos correspondientes a las categorías 01 a 19 de la Solicitud de la Demandada.
297. La argumentación de la Demandada, en su Memorial Pre-Audiencia CFE, pretende desvirtuar tanto la posición planteada por la Demandante en su Memorial de Demanda, como las conclusiones del perito de Empalme contenidas en el Reporte GPS I en relación con las siguientes Deficiencias Menores:²⁰⁴
- DM 204, DM 322, DM 352, DM 353, DM 364, DM 399, DM 416, DM 434, DM 448, DM 455, DM 474, DM 477, DM 494, DM 514, DM 517, DM 532, DM 542, DM 556 y DM 559.
298. Al explicar detalladamente la situación de cada una de las Deficiencias Menores arriba citadas,²⁰⁵ el argumento central de la Demandada para desvirtuar los argumentos de Empalme y su valorización de dichas DMs, consiste en su señalamiento de que la Demandante no exhibió las documentales que le fueron solicitadas por CFE; en consecuencia, “...*al no presentar la documentación solicitada en la etapa de “Solicitud de Exhibición de Documentos”, se hace*

²⁰² Contestación a la Demanda, ¶ 922.]

²⁰³ Contestación a la Demanda, ¶¶ 923 a 937.

²⁰⁴ Memorial Pre-Audiencia CFE, ¶¶ 16 a 38.

²⁰⁵ Valorización contenida en la Tabla 19 (Resumen de la estimación de DM abiertas), páginas 126 a 135 del Dictamen GPS I, Anexo AP-001 del Memorial de Demanda.

*evidente que el Perito GPS I no contó con el soporte necesario para determinar el monto y cuya evidencia se debió aportar desde la presentación del Memorial de Demanda”.*²⁰⁶

299. En su siguiente oportunidad procesal, consistente en su Memorial de Cierre, la Demandada cuestiona y descalifica los cuatro dictámenes periciales ofrecidos por la Demandante, aduciendo que *todos mintieron*, mas independientemente de ello dedica su argumentación, en su totalidad, a controvertir la Deficiencia Menor 331 y el Reclamo de Garantía 17 (mismos que se analizan en otras secciones de este Laudo), sin hacer alusión a las demás Deficiencias Menores sobre las cuales formuló sus argumentos la Demandante, apoyándose en el Reporte GPS I y en el Reporte GPS II.²⁰⁷
300. El Memorial de Cierre CFE contiene un capítulo X (Objeciones Procesales de CFE), en cuyo inciso “c” (Equipo de Expertos GPS (AP-001 y AP-002), la Demandada manifiesta que “*En el caso del equipo de expertos de GPS no ha escapado a las malas prácticas de Empalme y su representación legal ... [en virtud de que] del desarrollo del interrogatorio a dicho grupo de expertos, se demostró que el Peritaje AP-002 fue formulado a partir de fragmentos de Informes de Experto (AP-003 y AP-004) que serían ‘inexistentes’ a la fecha de firma del Informe AP-002 ... [y] la única explicación de lo anterior es que no sólo quedó develada una nueva y directa intervención de Empalme en la formulación de las conclusiones de los peritos ... [sino] que se hizo patente que la Demandante desplegó una completa estrategia para concentrar, revisar y coordinar los resultados de todas las periciales presentadas con el objetivo hacer que todas las conclusiones obtenidas fueran favorables a su caso”.*²⁰⁸
301. Según se desprende de las manifestaciones anteriores de la Demandada, sus aseveraciones involucran específicamente los Informes de Experto AP-003 y AP-004, relacionados con la Deficiencia Menor 331 y el Reclamo de Garantía 17, que se analizan en otras secciones de este Laudo, y en dichas manifestaciones no se alude a alguna otra Deficiencia Menor en particular.

Análisis del Tribunal Arbitral en relación con DMs, excepto DM-331

302. La primera dificultad que enfrenta el Tribunal Arbitral para poder resolver las cuestiones inherentes a este capítulo, es determinar cuáles, de las 586 Deficiencias Menores existentes de conformidad con el Certificado de Aceptación Provisional, subsisten como tales frente a las constancias que forman parte del expediente del arbitraje, al 2 de mayo de 2022, fecha de los Memoriales de Cierre de ambas Partes. Hecho esto último, el Tribunal Arbitral debe determinar el estado de cada una de esas Deficiencias Menores y los efectos que deben resultar

²⁰⁶ Memorial Pre-Audiencia CFE, ¶¶ 11 a 15.

²⁰⁷ Memorial de Cierre CFE, ¶¶ 78 a 82 y siguientes.

²⁰⁸ Memorial de Cierre CFE, ¶¶ 162 a 166.

en consecuencia, para finalmente determinar el valor económico correspondiente a cada una de las Partes.

303. En su proceso de análisis, el Tribunal Arbitral encuentra que conforme al Memorial de Cierre Empalme *solamente existen 78 DMs en controversia*²⁰⁹, mientras que la Demandada manifiesta que *para acreditar que Empalme únicamente sería responsable de 56 DMs y que de manera conjunta ascienden a USD 1'040,512.56, la Demandante acompañó el Reporte GPS I.*²¹⁰
304. Como consta en el expediente del presente arbitraje, para sustentar sus pretensiones, de las que forman parte las relativas a la atención de las Deficiencias Menores identificadas en el Acta de Aceptación Provisional, así como el estado de las mismas, la Demandante exhibió con su Memorial de Demanda el dictamen pericial que consta en el citado Reporte GPS I²¹¹, en cuyo Apéndice GPS 08, que es parte integrante del mismo, se expone un análisis sucinto de las Deficiencias Menores y se señala su estado. La Demandada, por su parte, para apoyar las manifestaciones que formula en su Contestación a la Demanda en relación con cada una de las Deficiencias Menores citadas, y controvertir las aseveraciones del perito de la Demandante contenidas en el Reporte GPS I, exhibió con dicha Contestación a la Demanda el Dictamen Pericial Ing. Cámara Anzures.²¹²
305. Lo anterior es relevante, pues si bien las Partes fijaron sus respectivas posiciones iniciales en el Memorial de Demanda y la Contestación a la Demanda, es importante tener en cuenta que, después de la presentación de este último Memorial, las Partes dispusieron de un período que se prolongó por más de tres meses, para analizar las posiciones de la Parte contraria conforme a su respectivo Memorial, y solicitar en consecuencia la exhibición de documentos en poder o bajo el control de la Parte contraria. Una vez atendidos los cuestionamientos de las Partes en relación con los documentos solicitados por la Parte contraria, sobre los cuales resolvió lo conducente el Tribunal Arbitral en su oportunidad, concluyó la etapa de exhibición de documentos y las Partes dispusieron de dos meses más para presentar sus respectivos Memoriales Pre-Audiencia.
306. En su Memorial Pre-Audiencia, Empalme rebatió las manifestaciones formuladas por CFE en su Contestación a la Demanda, así como las aseveraciones contenidas en el citado Dictamen Pericial Ing. Cámara Anzures, con los que CFE controvertió las pretensiones contenidas en el Memorial de Demanda de Empalme, así como el contenido del Dictamen GPS I, en relación con las Deficiencias Menores identificadas en el Acta de Aceptación Provisional.

²⁰⁹ Memorial de Cierre Empalme, ¶ 23.

²¹⁰ Memorial de Cierre CFE, ¶ 78.

²¹¹ Dictamen GPS I, Anexo AP-001 del Memorial de Demanda.

²¹² Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001 de Contestación a la Demanda.

307. Para sustentar sus argumentos, la Demandante presentó con el Memorial Pre-Audiencia Empalme el Dictamen GPS II, del que forma parte el Apéndice No. 1, que contiene el Análisis Técnico de las Deficiencias Menores objeto de controversia, al 25 de noviembre de 2021. En el Anexo A-100 del Memorial Pre-Audiencia Empalme, la Demandante relaciona dichas Deficiencias Menores y describe el estado de cada DM a la fecha mencionada, de conformidad con el Dictamen GPS II y dicho Apéndice No.1.
308. Aunque la Demandada refutó nuevamente en su Memorial Pre-Audiencia CFE las manifestaciones de Empalme contenidas en su Memorial de Demanda, así como el Dictamen GPS I exhibido por Empalme con dicho Memorial, fue no obstante omisa en presentar algún instrumento probatorio para sustentar sus argumentos.
309. En la siguiente tabla se muestran las diversas Deficiencias Menores controvertidas por las Partes, señalando (i) el estado de cada una de dichas DMs desde la perspectiva de cada una de las Partes, tomando en consideración lo manifestado en sus respectivos Memoriales Pre-Audiencia; (ii) las 6 Deficiencias Menores respecto a las cuales CFE ejecutó la Carta de Crédito HSBC; (iii) las conclusiones del perito de la Demandante en el Dictamen GPS I y su Apéndice GPS 08, exhibidos con el Memorial de Demanda; y, (iv) las conclusiones del perito de la Demandante en el Dictamen GPS II y su Apéndice GPS 01, en los que hace referencia al Dictamen Pericial Ing. Cámara Anzures, exhibidos por Empalme con el Memorial Pre-Audiencia Empalme, para sustentar el Anexo A-100 de dicho Memorial.

Estado de Deficiencias Menores, al 25 de noviembre de 2021

DMNo.	Estado según Empalme	Estado según CFE	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021
24	Repetida	Abierta		Repetida Cerrada	No es DM*
25	Atendida	Abierta		Atendida y Cerrada	Atendida
26	Atendida	Abierta		Atendida y Cerrada	Atendida
35	Atendida	Abierta		Atendida FAC*	Atendida
37	FAC	Abierta		No procede Cerrada	No procede Cerrada
38	Atendida	Abierta		Atendida	Atendida
41	Abierta	Abierta		Abierta	Abierta
42	Abierta	Abierta		Abierta y PFCoP*	Abierta
43	Abierta	Cierre Posterior		Abierta, PFCoP y RPP	
44	Atendida	Abierta		Atendida	Atendida
45	Abierta	Abierta		Abierta	Abierta
49	Abierta	Abierta		Abierta	Abierta

DMNo.	Estado según Empalme	Estado según CFE	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021
51	Repetida, con DM-502	Abierta		Cerrada Repetida con DM 202 que está Cerrada	Repetida con DM-202, debe considerar Cerrada
72	FAC	Abierta		FAC, Cerrada	FAC, Cerrada
119	FAC	Cerrada por CFE	SÍ	Cerrada, SC*	Cerrada, FAC y SCCC*
146	Atendida	Abierta	SÍ	Abierta	Atendida, debe ser Cerrada y SCCC
203	FAC	Abierta	SÍ	Cerrada, FAC	Cerrada, FAC y SCCC
204	Atendida	Abierta	SÍ	Abierta	Atendida, debe ser Cerrada y SCCC
208	Atendida,	Cerrada por CFE	SÍ	Cerrada, SC	Atendida, debe ser Cerrada y SCCC
212	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
234		No analizada		Cerrada, SC	
294		Cerrada por CFE	SÍ	Cerrada, SC	Atendida, debe ser Cerrada y SCCC
295		Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
321	Abierta	Abierta		Abierta, pendiente por reprogramación CFE y Covid 19	Abierta
322	Abierta, según Empalme procede	Cerrada por CFE	SÍ	Abierta	Procede, tomar en cuenta valor Reporte GPS II
324	FAC	Cerrada por CFE	SÍ	Abierta, faltan pruebas de carga	Atendida, debe ser Cerrada y SCCC
329	Repetida con DM-345	Abierta		Abierta	Repetida y debe cerrarse
330	Repetida con DM-343 y DM-538	Abierta	SÍ	Repetida con DM-358	FAC, debe cerrarse y SCCC
331	Se analiza especialmente	Se analiza especialmente	SÍ	Se analiza especialmente	Se analiza especialmente
338	Abierta	Abierta		Abierta	Abierta
341	Cerrada	Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
342	Cerrada	Cerrada por CFE	SÍ	Cerrada, Repetida con DM-12	Repetida, debe ser Cerrada y SCCC
343	Cerrada	Abierta	SÍ	Cerrada, Repetida con DM-358	Repetida, debe ser Cerrada y SCCC
345	Abierta	Abierta		Cerrada, aplica DM-329	Abierta

DMNo.	Estado según Empalme	Estado según CFE	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021
349	Atendida, Cerrada	Abierta	SÍ	Atendida, Cerrada	Atendida, debe ser Cerrada y SCCC
351	Atendida	Abierta	SÍ	Atendida, Cerrada	Atendida, debe ser Cerrada y SCCC
352	Abierta	Abierta	SÍ	Abierta	Abierta
353	Abierta	Abierta	SÍ	Abierta	Abierta
356	Atendida	Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
358	Abierta, Atendida parcialmente	Abierta	SÍ	Abierta	Atendida, debe ser Cerrada y SCCC
360	Abierta	Cierre posterior		Abierta	
364	Cerrada	Cerrada		Abierta	Cerrada
365	FAC	Abierta		Cerrada	FAC, debe ser Cerrada
368	FAC	Abierta	SÍ	Atendida y FAC, Cerrada	FAC, debe ser Cerrada y SCCC
371	Abierta	Abierta	SÍ	Abierta	Abierta
375	Imposible prueba Modo Isla	Abierta	SÍ	Cerrada, alcance de Empalme	IRP*, se debe considerar Cerrada
376	Cerrada	No analizada		Cerrada, SC	
377	FAC	Abierta	SÍ	Atendida, FAC y Cerrada	FAC, debe ser Cerrada y SCCC
385	Atendida	Cerrada por CFE	SÍ	Atendida y Cerrada	Atendida, debe ser Cerrada y SCCC
387	FAC	Abierta	SÍ	Atendida y FAC	FAC, debe ser Cerrada y SCCC
392	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
393		No analizada		Cerrada, SC	
399	Abierta	Abierta	SÍ	Abierta, RPP	Abierta
416	Abierta	Abierta		Abierta, RPP	Abierta
429	FAC	Cerrada por CFE	SÍ	Atendida y Cerrada	Cerrada
431	Atendida	Abierta	SÍ	Atendida y Cerrada	Atendida, debe ser Cerrada y SCCC
432	FAC	Cerrada por CFE	SÍ	Cerrada, FAC	FAC, debe ser Cerrada y SCCC
433	Abierta	Abierta	SÍ	Cerrada. No posible en equipo paquete	Cerrada y SCCC
434	Abierta	Cerrada por CFE	SÍ	Abierta	Procede, tomar en cuenta valor Reporte GPS II

DMNo.	Estado según Empalme	Estado según CFE	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021
436	Abierta	Abierta	SÍ	Abierta	Abierta
437	Abierta	Abierta	SÍ	Abierta	Abierta
438	Abierta	Abierta	SÍ	Cerrada	FAC, debe ser Cerrada y SCCC
440	Abierta	Abierta		Cerrada	Faltantes repetidos Debe cerrarse
442	Cerrada	Cerrada por CFE	SÍ	Cerrada	Cerrada y SCCC
444	FAC	Abierta	SÍ	FAC, Cerrada	FAC, debe ser Cerrada y SCCC
446	FAC	Cerrada por CFE	SÍ	FAC, Cerrada	FAC, debe ser Cerrada y SCCC
448	Abierta	Abierta	SÍ	Abierta	Abierta
450	FAC	Abierta	SÍ	FAC, Cerrada	FAC, debe ser Cerrada y SCCC
453	Abierta	Abierta	SÍ	Abierta	Abierta
454	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
455	Abierta	Abierta	SÍ	Abierta	Abierta
456	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
457	Abierta	Abierta	SI	Abierta	Abierta
458	Abierta	Abierta	SÍ	Abierta	No procede cobro Carta de Crédito
459	Repetida	Cerrada por CFE	SÍ	Cerrada	Repetida, debe cerrarse SCCC
460	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada
462	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
466	Abierta	Abierta	SÍ	Abierta	Atendida, debe ser Cerrada y SCCC
467	Abierta	Abierta	SÍ	Abierta	Procede, tomar en cuenta valor Reporte GPS II
468	FAC	Cerrada por CFE	SÍ	Cerrada	FAC, debe ser Cerrada y SCCC
469	Atendida	Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
472	Abierta	Abierta		Cerrada	FAC, debe ser Cerrada
474	Abierta	Abierta	SÍ	Abierta	Abierta
475	Abierta	Abierta	SÍ	Abierta	Abierta
476	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC

DMNo.	Estado según Empalme	Estado según CFE	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021
477	Abierta	Cierre posterior		Abierta	
482	Atendida	Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
484	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
485	Atendida e IRP	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
487	Abierta	Abierta	SÍ	Abierta	Abierta
489	IRP	Abierta	SÍ	Cerrada	IRP, se debe considerar Cerrada
490	IRP	Abierta	SÍ	Cerrada	IRP, se debe considerar Cerrada
492	Repetida	Abierta	Abierta	Cerrada, Repetida	Repetida, debe cerrarse
493	Atendida	Cerrada por CFE	SÍ	Repetida	Atendida, debe ser Cerrada y SCCC
494	Abierta	Abierta	SÍ	Abierta	Abierta
507	FAC	Cerrada por CFE	SÍ	Cerrada	FAC, debe ser Cerrada
509	FAC	Cerrada por CFE	SÍ	Cerrada	FAC, debe ser Cerrada
512	Abierta	Cerrada por CFE	SÍ	Abierta	Procede, tomar en cuenta valor Reporte GPS II
513	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
514	FAC	Cerrada por CFE	SÍ	Cerrada, FAC	FAC, debe ser Cerrada y SCCC
515	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
517	Abierta	Abierta	SÍ	Abierta	Abierta
532	Abierta	Abierta		Abierta	Abierta
535	Abierta	Abierta	SÍ	Abierta	Abierta
541	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada
542	IRP	Abierta	SÍ	Cerrada	IRP, se debe considerar Cerrada
547	Abierta	Abierta	SÍ	Cerrada	Abierta
550	Atendida	Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
551	Cerrada	Cerrada por CFE	SÍ	Cerrada	
554	Abierta	Abierta	SÍ	Abierta	Abierta

DMNo.	Estado según Empalme	Estado según CFE	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021
555	FAC	Abierta	SÍ	Cerrada	FAC, debe ser Cerrada y SCCC
556	Abierta	Abierta	SÍ	Abierta	Abierta
557	FAC	Cerrada por CFE	SÍ	Cerrada	FAC, debe ser Cerrada y SCCC
558	Abierta	Abierta	SÍ	Abierta	Abierta
559	Abierta	Abierta	SÍ	Abierta	Abierta
560	Atendida	Cerrada por CFE	SÍ	Abierta	Atendida, debe ser Cerrada y SCCC
561	Atendida	Abierta	SÍ	Cerrada	Causa DM no imputable; debe ser Cerrada y SCCC
562	Atendida	Abierta	SÍ	Cerrada	Causa DM no imputable; debe ser Cerrada y SCCC
563	FAC	Cerrada por CFE	SÍ	Cerrada	FAC, debe ser Cerrada y SCCC
564	FAC	Abierta	SÍ	Cerrada	FAC, debe ser Cerrada y SCCC
570	Atendida	Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
571	Abierta	Abierta	SÍ	Abierta	Abierta
572	Atendida	Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
575	Atendida	Cerrada por CFE	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
1 Siemens	Atendida	Abierta	SÍ	Cerrada	Atendida, debe ser Cerrada y SCCC
3 Siemens	Atendida	Cierre Posterior		Cerrada	Atendida, debe ser Cerrada y SCCC
4 Siemens	Atendida	Cerrada por CFE	SÍ**	Cerrada	Atendida, debe ser Cerrada y SCCC
5 Siemens	Atendida	Cerrada por CFE	SÍ**	Cerrada	Atendida, debe ser Cerrada y SCCC

* Abreviaturas:

DM: Deficiencia Menor
FAC: Fuera del Alcance del Contrato
RPP: Requiere Parada de Planta
Garantía
Ejecutada: Carta de Crédito HSBC
PFCoP: Problema Flujo de Caja o Pago
SC: Sin Comentarios
SCCC: Sin Cobro a Carta de Crédito

IRP: Imposibilidad de realizar Pruebas, por causas no imputables a Empalme

** En Apéndice No. 1 (Análisis Técnico) del Dictamen GPS II, se señala que “*como la CFE manifiesta, la DM se encuentra Cerrada y para la atención de esta DM, no ejerció ningún recurso proveniente del cobro de la Garantía de Cumplimiento.*”

NOTA: Eventualmente, el estado de alguna DM, según Empalme o según CFE, puede variar respecto a lo que se muestra en la tabla, en virtud de que el estado existente originalmente a la fecha del Memorial de Demanda o del Memorial de Contestación, puede haberse modificado posteriormente. Para efectos de la tabla anterior, el estado de la DM debe ser el que resulta del último Reporte GPS, es decir, al 25 de noviembre de 2021.

310. De todo lo anterior, salta a la vista que, al 2 de mayo de 2022, fecha del Memorial de Cierre CFE, Empalme había presentado cinco meses antes el Memorial Pre-Audiencia Empalme, con cuyo Anexo A-100 identificó desde su perspectiva el estado de cada una de las DMs originalmente existentes, en el que se señalan 41 DMs “Abiertas” según Empalme y 84 DMs “Abiertas” según CFE, sin que la Demandada haya rebatido lo anterior en el Memorial de Cierre CFE. Es un hecho que CFE no alude DM específica alguna, con excepción de la DM-331, que el Tribunal Arbitral analiza más adelante.
311. Asimismo, cabe destacar que la Demandante también acompañó a su Memorial Pre-Audiencia Empalme el Dictamen GPS II, del que a su vez forma parte el Apéndice GPS 01 (Análisis Técnico de las DMs), en el que se analizan pormenorizadamente 88 DMs; y si bien es incuestionable que la Demandada también tuvo a su disposición dicho Apéndice, toda vez que en su Memorial de Cierre CFE descalifica en términos generales el Reporte GPS II²¹³, tampoco alude –y mucho menos rebate– los análisis y conclusiones del perito de Empalme que se contienen en el Apéndice GPS 01 citado.
312. En este contexto, el Tribunal Arbitral procede al análisis de las circunstancias de cada una de las Deficiencias Menores que subsisten como controvertidas a la fecha de presentación de los Memoriales de Cierre de las Partes, que contienen sus últimas argumentaciones, con base en las constancias que forman parte del expediente, mismas que incluyen la Transcripción.
313. El Tribunal Arbitral toma en consideración que, a la fecha del Memorial de Cierre Empalme, de las 586 Deficiencias Menores identificadas en el Acta de Aceptación Provisional,²¹⁴ el perito de Empalme realiza un análisis técnico detallado de las 88 DMs que se identifican en el Apéndice No. 1 del Reporte GPS II; y como resultado de dicho análisis, identifica 7 DMs que según pretende Empalme deben considerarse “Cerradas” (DM 51, DM 330, DM 333, DM 342, DM 343, DM 345 y DM 492) y 3 DMs (DM 202, DM 358 y DM 512), que también deben

²¹³ Memorial de Cierre CFE, ¶¶ 78, 79 y 162, entre otros.

²¹⁴ Anexo A-109, Acta de Aceptación Provisional, Anexo 9 (Listado de Deficiencias Menores).

considerarse “Cerradas”²¹⁵. La resta de estas últimas 10 DMs, de las 88 DMs objeto del análisis técnico antes citado, arroja como resultado las 78 DMs, en controversia a que se refiere Empalme²¹⁶.

314. En relación con el análisis técnico antes referido, el Tribunal Arbitral tiene presente que la Demandada controvierte en su Memorial Pre-Audiencia CFE ciertas Deficiencias Menores relacionadas con su anterior Solicitud de Exhibición de Documentos, que fueron materia de dicho análisis técnico (DM 204, DM 322, DM 352, DM 434, DM 514 y DM 542), mas no vuelve a considerarlas en las argumentaciones que formula en su Memorial de Cierre CFE, y tampoco en la Audiencia, donde además de ello su perito tampoco hizo alusión a esas Deficiencias Menores.
315. Si bien la Demandada controvierte en su Memorial Pre-Audiencia CFE otras Deficiencias Menores también relacionadas con su anterior Solicitud de Exhibición de Documentos (DM 353, DM 364, DM 399, DM 416, DM 448, DM 455, DM 474, DM 477, DM 494, DM 517, DM 542, DM 556 y DM 559), estas últimas no fueron materia del análisis técnico mencionado; y nuevamente, la Demandada no vuelve a considerarlas en las argumentaciones de su Memorial de Cierre CFE ni en la Audiencia, donde tampoco lo hizo su perito, ingeniero Lorenzo José Cámara Anzures.
316. El Tribunal Arbitral constató lo anterior en la Audiencia, tanto con la presentación del perito de la Demandada como en el contrainterrogatorio que se le formuló, como se aprecia del siguiente fragmento de la Transcripción:²¹⁷

“Santiago Oñate: ...

Le voy a compartir su dictamen, nuevamente, y lo voy a llevar al párrafo 263.

¿Lo puede visualizar?

En este párrafo usted comienza lo que denomina análisis técnico y opinión específica de las Dm's y RG, solicitadas por la comisión, ¿cierto?

Lorenzo José Cámara Anzures: Así está escrito.

Santiago Oñate: ¿Y la manera en como usted presenta su análisis es que primero describe en qué consiste la deficiencia menor, después, (sic) cuál es la respuesta o postura de la Comisión Federal de Electricidad. Y, finalmente, termina con lo que denomina opinión del perito ¿cierto?

Lorenzo José Cámara Anzures: Omitió nada más indicar, efectivamente, la descripción de la deficiencia. Posteriormente cuál es la opinión o la conclusión de GPS, después cuál es la respuesta de CFE y, efectivamente, cuál es mi opinión.

²¹⁵ Apéndice No. 1 del Dictamen GPS II.

²¹⁶ Memorial de Cierre Empalme, ¶ 23.

²¹⁷ Transcripción 17-02-2022 (4ª. Parte), páginas 23 a 25.

Santiago Oñate: De acuerdo.

Me voy a permitirle mostrar nuevamente su dictamen. Le pido una disculpa por esta intermitencia, ha estado un poco lento el internet en subir el documento, pero ahorita se lo muestro.

Le voy a mostrar unos ejemplos.

En este usted analiza la DM-375, ¿lo puede ver en la pantalla?

Lorenzo José Cámara Anzures: Sí.

Santiago Oñate: Muy bien.

Aquí seguimos esta descripción que le hice, comienza con una descripción en lo que consiste la deficiencia menor, si bajamos un poco vemos la respuesta de la CFE, después si bajamos un poco tiene su opinión de perito, que son cinco líneas en las cuales usted emite su opinión.

Y dice: al existir confusión por el contratista en cuanto al período de garantía que era aplicable, dejó de hacer las pruebas correspondientes. Sin embargo, con la aplicación de la garantía de cumplimiento se libera el contratista de esta responsabilidad y, por lo tanto, esta deficiencia menor debe ser atendida por la comisión para cerrarse, ¿lo leí correctamente?

Lorenzo José Cámara Anzures: Es correcto.

Santiago Oñate: Le voy a mostrar otro ejemplo.

Vamos a ir a la DM-515, en la página 96. Lo mismo, escribe en qué consiste la deficiencia menor, después, si bajamos vemos que hace un relato de lo que es la respuesta de la CFE, y concluye con dos líneas de análisis sobre la deficiencia menor, y dice: con la aplicación de la garantía de cumplimiento se libera al contratista de esta responsabilidad y debe darse por abierta, pero a cargo de la comisión.

¿Lo leí correcto?

Lorenzo José Cámara Anzures: Sí, es correcto.

Santiago Oñate: ¿Le sorprendería si le dijera que estos dos párrafos que acabamos de ver, tanto el que usa para el análisis de la DM-375 y la DM-515 son los únicos dos párrafos que utiliza para analizar todas las deficiencias menores en su dictamen pericial?

Lorenzo José Cámara Anzures: ¿Me sorprende? No, no me sorprende.

Santiago Oñate: Okay. Gracias.

Pasemos a ver el análisis de los reclamos de garantía.

...”

317. Del Dictamen Pericial Ing. Cámara Anzures se desprende²¹⁸ que bajo el rubro “Análisis Técnico y Opinión Específica de las DM’s y RG solicitados por la Comisión”, el perito de

²¹⁸ Dictamen Pericial Ing. Cámara Anzures, ¶¶ 263 a 535, Anexo DP-001 de Contestación a la Demanda.

CFE presenta el análisis de solamente 14 Deficiencias Menores, que abajo se precisan, como lo hace notar el perito de Empalme en la Tabla de su segundo dictamen²¹⁹.

DM 331, DM 375, DM 436, DM 437, DM 444, DM 489, DM 490, DM 515, DM 517, DM 542, DM 556, DM 558, DM 561 y DM 562.

318. De la lectura del análisis técnico de las Deficiencias Menores citadas, el Tribunal Arbitral advierte que, con excepción de la DM 331, a cuyo análisis dedica el perito de CFE una extensión considerable, es omiso en hacer referencia a las demás DMs referidas por Empalme en su Memorial de Demanda. Asimismo, la opinión que formula el perito de CFE en el Dictamen Pericial Ing. Cámara Anzures en relación con cada una de las 13 DMs restantes, es literalmente la misma opinión que expresó en relación con la DM 375 y la DM 515, sobre las cuales lo cuestionó en la Audiencia el representante de Empalme en el contrainterrogatorio, como consta en la transcripción antes citada.
319. En virtud de las circunstancias anteriores, es evidente que la Demandada fue omisa en controvertir las aseveraciones contenidas en el Memorial Pre-Audiencia de Empalme, así como en los dos dictámenes periciales presentados por la Demandante y en el análisis técnico que forma parte del Dictamen GPS II, sin que la Demandada logre desvirtuarlos.
320. Del Memorial de Cierre Empalme, se desprende que de conformidad con sus manifestaciones el estado de las Deficiencias Menores identificadas en el Acta de Aceptación Provisional, al 25 de noviembre de 2021, es el que se detalla en el Anexo A-100 de su Memorial Pre-Audiencia Empalme. En dicho Anexo se enlistan las 586 Deficiencias Menores originales, de las cuales, a la fecha mencionada deben considerarse “Abiertas” 84 según CFE, y solamente 41 según Empalme.
321. Asimismo, a fin de sustentar sus pretensiones en relación con cada una de las DMs aún en controversia la Demandante exhibió como Anexo AP-002 del Memorial Pre-Audiencia Empalme, el Dictamen Pericial para el Memorial Pre-Audiencia Empalme (Reporte GPS II), del que forma parte como Apéndice No. 1 el análisis técnico de 88 Deficiencias Menores.
322. Según advierte el Tribunal Arbitral al analizar el Dictamen GPS II y los términos de dicho Apéndice No. 1, el perito de Empalme señala la descripción de la DM respectiva, emitida por CFE, y acto seguido consigna la respuesta formulada por CFE en su Contestación a la Demanda, respecto a lo manifestado por Empalme en su Memorial de Demanda en relación con esa misma DM. Hecho esto, el perito realiza el análisis técnico de la DM en turno y formula sus conclusiones sobre la procedencia de considerar “Abierta” o “Cerrada” la DM respectiva.

²¹⁹ Dictamen GPS II, ¶¶ 120 a 123, Anexo A-002 del Memorial Pre-Audiencia Empalme.

323. Para la determinación del estado de “Abierta” o “Cerrada” que debe corresponder a la DM respectiva, es necesario considerar factores tales como la vigencia del Período de Garantía y la responsabilidad de Empalme durante el mismo, la ejecución de las pruebas previstas en el Contrato y la imposibilidad reconocida de ejecutar ciertas pruebas por causas no imputables a Empalme, así como la justificación de la demora en la atención de ciertas Deficiencias Menores, derivada de causas no imputables a Empalme. Todas estas cuestiones fueron consideradas por el perito de la Demandante, tanto en el Dictamen GPS II como en su Apéndice GPS 01, con los que Empalme rebate el contenido del Dictamen Pericial Ing. Cámara Anzures, perito de la Demandada.
324. Además de lo mencionado en los párrafos anteriores, el Tribunal Arbitral advierte que, en el análisis técnico de cada DM, el perito de Empalme comenta, como parte de su análisis y en sus conclusiones, si es o no procedente -dependiendo de la naturaleza de la DM respectiva- que CFE haga un cargo a Empalme por el costo de la atención de la DM, ya sea mediante la carta de crédito o requiriendo el pago directamente a Empalme.
325. Según se desprende de la tabla anterior, así como de las posiciones e intervenciones de la Demandada y de su perito, que constan en los memoriales de CFE y en el Dictamen Pericial Ing. Cámara Anzures, así como de su intervención en la Audiencia, el estado final de las Deficiencias Menores controvertidas, es el que se consigna en dicha tabla, toda vez que la Demandada no logró desvirtuar las pretensiones de la Demandante ni las conclusiones de su perito, que resultan del análisis técnico de dichas Deficiencias y se detallan en el Apéndice No. 1 del Dictamen GPS II.
326. En relación con lo anterior, cabe tener en cuenta que en el Reporte GPS II se presenta en la sección 10.1.1 “Valoración de Deficiencias Menores (DM)” la Tabla 10, que contiene un resumen de la estimación de DM Abiertas y se inserta a continuación. En relación con dicha tabla, el perito GPS explica que²²⁰:

“232. Para el análisis de la estimación de costos de las DM como se mencionó en el informe inicial de GPS, [Reporte GPS I, ¶¶ 407 a 412, con Tabla 19, Anexo AP-001 del Memorial de Demanda] se está restando el valor de aquellas que fueron ejecutadas por EMPALME. Y GPS considero (sic) que no tenía responsabilidad en el cierre. Además, también se descontó el costo asignado por la CFE de las DM que ya habían sido descontadas por la CFE en los acuerdos establecidos y descontados para la Aceptación Provisional de la Planta, Entre estas están la DM-26, DM-35, DM-375, DM-489, DM-514 y, DM-542. Para este análisis se consideraron negativas para que descuenten del total.

²²⁰ Dictamen GPS II, ¶¶ 232 a 234, Anexo A-002 del Memorial Pre-Audiencia Empalme.

...

234. De acuerdo con la anterior tabla, [es decir la siguiente] el cálculo realizado por GPS para las DM abiertas y descontadas es de Ochocientos Ochenta y un Mil Quinientos Cuarenta y Ocho Dólares Americanos con 94/100 (USD 881,548.94) que EMPALME debe reconocer a CFE.”

Tabla 10. Resumen de la Estimación de DM Abiertas

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
26	Colocar caseta a los rectificadores de la protección catódica que se encuentran en la obra de toma. 7.3.4.10.5 características técnicas de protección catódica.	-128.000,00	0,00	-6.034,04	Se ratifica el valor presentado en el Peritaje inicial de GPS. Se descuenta de acuerdo con análisis Técnico.
35	En el calentador de gas y filtro de gas se tienen los transmisores montados sin gabinete, en paquete de calentador de gas, Se deberán instalar en gabinetes NEMA 4X	-37.397,36	0,00	-1.762,95	Se ratifica el valor presentado en el Peritaje inicial de GPS. Se descuenta de acuerdo con análisis Técnico.
41	En la falla de los servidores de las TGs se detectó que los sistemas de control de las TGs no se operan desde el DCS, se verificará "La integración al DCS del sistema de control de las unidades turbogas y Turbina de Vapor, de tal forma que la operación y supervisión se realice a través de las estaciones de operación del DCS, sin embargo, se cuenta	0,00	0,00	0,00	Costo incluido en el costo de la DM 457 y DM-466.

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
	con el control de carga de las unidades desde el SCD.				
42	Se debe complementar la Implementación del sistema supervisorio de variables dinámicas de los turbogeneradores de gas, Con el software y hardware para realizar las funciones de los conceptos que se enlistan a continuación: 1. Análisis espectral. 2. Análisis de balanceo. 3. Análisis de Lissajous u órbitas. 4. Diagramas de bode. 5. Diagramas de cascada. 6. Diagramas de centro de línea. 7. Diagramas de forma de onda. 8. Lista de valores señal global ángulo de fase.	0,00	72.200,00	72.200,00	Se ratifica el valor presentado en el Peritaje inicial de GPS.
43	Se debe completar la Implementación del sistema supervisorio de variables dinámicas del turbogenerador de vapor, Con el software y hardware para realizar las funciones de los conceptos que se enlistan a continuación: 1. Análisis espectral. 2. Análisis de balanceo. 3. Análisis de Lissajous u órbitas. 4. Diagramas de bode. 5. Diagramas de cascada. 6. Diagramas de centro de línea. 7. Diagramas de forma de onda. 8. Lista de valores señal global ángulo de fase.	0,00	0,00	0,00	Cerrada con oficio 742.160/JALV-009/21 del 24 de agosto de 2021. No tiene un importe económico con cargo a EMPALME.
45	Se requiere complementar el suministro del Software de simulación "que emule las condiciones dinámicas de las unidades y Ciclo Combinado completo, capaz de reproducir fielmente el comportamiento	0,00	151.060,00	151.060,00	Se ratifica el valor presentado en el Peritaje inicial de GPS.

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
	de la Central en diferentes condiciones de operación normal, arranque-paro, entre otras, así como el curso correspondiente para el manejo de este emulador el cual consiste en la capacitación para 8 operadores con una duración de 80 horas, de acuerdo a lo marcado en el Anexo 1 del Contrato inciso E).				
49	Algunas válvulas de control se observan con falta de bypass y válvulas aisladoras, por lo que se requiere la instalación de las mismas. En el punto 7.3.5.11 válvulas de control indica que se debe de instalar una válvula de bypass por cada válvula de control instalada, además de que las válvulas de control se deben de instalar en un lugar de fácil acceso para su mantenimiento.	74.000,00	0,00	3.488,43	Se ratifica el valor presentado en el Peritaje inicial de GPS.
321	Impartir curso pendiente del sistema de excitación de las TGs, apartado 7.6.2.47 (entrenamiento sobre instalación, mantenimiento y operación, Etc.)	0,00	10.080,00	10.080,00	Estimado de acuerdo con el tiempo de la comunicación de la CFE No ROP-CCEI-166/20. Se ratifica el valor presentado en el Peritaje inicial de GPS.
322	Curso de operadores de acuerdo a la sección 5.1.2, inciso E "Área de Operación" del Anexo 1, haciendo énfasis de que la parte práctica de este curso deberá realizarse en las estaciones de operación de la Central y con un software de simulación que emule las condiciones de operación de las unidades y del ciclo combinado el cual deberá ser instalado en los laptops de instrumentación y control.	2.433.216,00	0,00	114.704,00	GPS avala el valor de cierre presentado por el Perito de la CFE, y manteniendo la tasa de cambio usada en peritaje inicial de GPS.
329	Verificar la hermeticidad en recintos en las casetas de gabinetes de control de los GVRCS y en el edificio eléctrico y de control, con sistema de protección contra incendios (FM200).	0	0	0	Esta DM esta repetida con la DM 345, por lo tanto, no debe tenerse en cuenta ningún valor para este ejercicio.
338	SE HAN DETECTADO LAS SIGUIENTES FUGAS: 1) Fuga en válvula de seguridad PSV 11HAC60AA201, en Domo de Baja Presión RC1. CERRADO REF.		9.525,00	9.525,00	De esta DM solo quedaron abiertos los puntos 2 y 22. Para la valoración se incluye la orden de Compra EMP1-SROP-OC-0116 del proveedor

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
	CSPPS-CCEI-1315-2019 2) Fuga en indicador de Nivel Local del Domo de Media Presión y Alta Presión del RC1. 30) Fuga por válvula aisladora del transmisor de nivel del tanque de agua desmineralizada D195 (CERRADO Ref. CSPPS-CCEI-1153-2019) Se solicita corregir cada una de ellas y verificar en conjunto su normalización.				Cerey S.A. de C.V. ¹⁷ , el cual aplica para los ítems pendientes 2 y 22.
345	Comprobar la funcionalidad de la hermeticidad en todos los recintos de la Planta que cuenten con sistema de extinción contra incendios por FM200, de acuerdo con la norma NFPA 2001 edición 2012	380,522.95	0	17.939.61	EMPALME obtuvo una cotización para los trabajos de cierre de esta DM. El valor cotizado corresponde a ICISA ¹⁸ Se ajusta el valor según cotización del proveedor ICISA.
352	Se observa daño en el asiento fijo y vástago de la válvula stopcheck de vapor de BP y VAPOR RECALENTADO CALIENTE 11/12LBA50AA001 y 11/12LBB10AA001, se solicita evaluar, corregir o reemplazar.	1.462.157,20	109.798,80	178.726,21	Se corrigió daño de una válvula de 28". El valor se ajusta de acuerdo con el estimado presentado en el Peritaje inicial de GPS. Quedando en el costo 2 válvulas de 18" y una de 28" más la mano de obra ¹⁹
353	Se observa falta de eficiencia de los HVAC en el área de cuarto de inversores y de baterías (cuarto de inversores, cuarto de control, área de oficinas en edificio eléctrico y laboratorio químico).	6.019,74	1.054,42	1.338,20	Se ratifica el valor presentado en el Peritaje inicial de GPS.
358	Verificar la calibración de las válvulas de seguridad del sistema de vapor recalentado frío en cabezal común con KKS PSV 10LBC10AA201, 10LBC10AA202, 10LBC10AA203 mismas que durante la operación de arranque en frío del tren de potencia 12 el día 18 de febrero de 2019, disparan válvulas de seguridad mencionadas y éstas quedan con fuga permanente presumiendo un daño en los internos de las válvulas. Se solicita dar atención.	160.000,00	5.555,18	13.097,72	Según el anexo del Memorial de Contestación a la Demanda, la CFE adquiere una válvula nueva. EMPALME informó que se cambiaron los internos de las válvulas mismas que fueron calibradas por Emerson y entregados los reportes a CFE el 27 de agosto de 2019 y el 28 de septiembre de 2019. El problema que dio origen a la DM se presentó por un disparo de Planta en agosto de 2019, cuando esta estaba a cargo de la CFE. Se mantiene el monto

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
					estimado incluido por GPS en el Peritaje inicial, por estar parcialmente abierta.
360	Durante la etapa de pruebas de tiempos de arranque en frío y tibio, se presentaron problemas de funcionamiento en el banco de eyectores del sistema de vacío al no presentar flujo de condensado, por lo que se realizó cambio de eyectores para corregir el problema. Se solicita comprobar la funcionalidad de los eyectores.	0	0	0	Esta DM fue cerrada oficialmente por la CFE sin cargo a la garantía de cumplimiento, mediante oficio CSPPS/CCEI-1602/2021 ²⁰ .
371	GENERADORES DE UNIDAD TG1, TG2 y TV 1) Verificar el equipo de monitoreo del generador RFM (es aceptable también el método de monitoreo PDM) y de partículas GCM (descargas parciales), de acuerdo a las Bases de Licitación 7.3.4.16.1. 2) Verificar el sistema de monitoreo independiente en línea para detección de corto circuito entre espiras del devanado de campo de los Generadores eléctricos, de acuerdo con las Bases de Licitación.	0,00	6.200,00	6.200,00	Se ajusta el valor según cotización del proveedor GIRSA IRIS POWER ²¹ , Solicitada por EMPALME.
375	Se requiere verificar el funcionamiento del modo Isla de las TGs en modo Ciclo Combinado operando una protección eléctrica de Planta.	0,00	-10.609,79	-10.609,79	Se mantiene el valor del Peritaje inicial de GPS, el cual fue calculado según el ponderado acordado con la CFE. La CFE está descontando un monto que ya había sido descontado.
399	Se requiere se verifique la habilitación de la función de modo de prueba de sincronización automática. En la unidad 3 TV.	157.600,54	0,00	7.429,43	Se ajusta el valor según cotización del proveedor LOSNOGA ²² del 13 de septiembre de 2021, remitida a EMPALME.
416	Se requiere verificar las mediciones en los registradores de disturbio de	145.750,22	0,00	6.870,80	Se ajusta el valor según cotización del proveedor LOSNOGA ²³ del 13 de

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
	voltaje de campo y corriente de campo de las TGs y TV.				septiembre de 2021, remitida a EMPALME.
434	En el sistema de sanitarias, se requiere revisar las condiciones del transmisor de flujo 10GUA40CF001 y realizar las verificaciones necesarias de dicho instrumento.	22.800,27	0,00	1.074,83	Se ajusta el valor según cotización del proveedor LOSNOGA ²⁴ del 13 de septiembre de 2021, remitida a EMPALME.
436	Revisar las condiciones del bypass de Media Presión 11LBB20AA090 para su apertura y cierre y realizar las comprobaciones correspondientes.	1.264.104,44	0,00	59.591,03	Empalme entregó a la CFE las partes de repuesto requeridas para el cierre de esta DM. La suma de los importes asociados a la DM-436 de los 3 contratos del soporte entregado por la CFE No 201028, 211002 y 203002, es por \$1,488,119.51, mismo que relaciona el perito de la CFE. Se identificó que sólo los conceptos asignados en el Contrato 201028, por un valor de \$1,264,104.44 son los que realmente aplican para el cierre de la DM-436.
437	Revisar las condiciones del bypass de alta presión del GVRC2 para su apertura y cierre y realizar las comprobaciones correspondientes.	632.052,22	0,00	29.795,51	La suma de los importes asociados a la DM-437 de los 3 contratos del soporte entregado por la CFE No 201028, 211002 y 203002, es por \$2.191.633,5 que difiere del valor del perito de la CFE, quien presenta MX 2.176.838,36 *Se identificó que sólo los conceptos asignados en el Contrato 201028 (de Turbopower services), por un valor de MX 1,264,104.44 serían los que realmente pertenecen a la DM-437 de manera parcial, ya que incluye trabajos en válvulas de by pass para la GVRC1 y GVRC2. * Se considera solo el 50% del valor.

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
445	Concluir la revisión de pantallas (gráficos) del DCS y descripciones en español, así como las pantallas de TV, TG's y equipos paquete en el Sistema de Control Distribuido DCS.	0,00	0,00	0,00	Los costos de la TV están incluidos en el valor de cierre de la DM 466 y los costos de las TG's en los de la DM 457 por tanto no se incluye costo en esta DM
448	En seguimiento al oficio CSPPS/CCEI-791/2019, se solicita sea entregado el reporte de la causa raíz de la problemática que se presentó en las válvulas motorizadas de los venteos de arranque de AP, MP y BP de los GVRC's 1 y 2.	0,00	4.500,00	4.500,00	Se ratifica el valor presentado en el Peritaje inicial de GPS.
453	Seguimiento y atención a la carta preventiva CP-IyC-13, relacionada al sensor de velocidad del tornaflecha de ambas unidades TG1 y TG2.	0,00	4.500,00	4.500,00	Se ratifica el valor presentado en el Peritaje inicial de GPS.
455	Se solicita se entregue la evidencia de atención al oficio CSPPS/CCEI-248/2017, relacionado a la lista de pendientes PCI TG1.	108.644,88	0,00	5.121,62	Se ajusta el valor según cotización del proveedor INTIME CONTROL ²⁵ del 29 de septiembre de 2021, remitida a EMPALME.
457	Verificar y comprobar los gráficos del HMI (interface, alarmas y descripciones) del sistema de control T3000 de las turbinas de gas TG1 y TG2, las cuales deben estar en el idioma español y las unidades de ingeniería en el sistema internacional SI. Así mismo verificar y comprobar las pantallas de las TG's en el sistema de control distribuido DCS.	0,00	142.478,55	142.478,55	Se ratifica el valor presentado en el Peritaje inicial de GPS.
458	Se solicita se entregue la evidencia de atención al oficio CSPPS/CCEI-322/2018, incidente derrateo de carga y disparo de las unidades TG1 y TG2.	0,00	0,00	0,00	Lo requerido en esta DM no está asociado a un valor económico. No hubo una afectación en el equipo eléctrico, no hay un documento específico que haya entregado Siemens sobre estas pruebas realizadas y señala que no ha habido señales de desperfectos posteriores

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
466	Verificar y comprobar en las pantallas (gráficos) de TV, las descripciones estén en el idioma español, así mismo verificar que las pantallas de TV se encuentren en el Sistema de Control Distribuido DCS.	110.563,00	0,00	5.212,04	Se ajusta el valor según cotización del proveedor RAHE ²⁶ del 30 de junio de 2021, remitida a EMPALME.
474	Derivado de la supervisión continua específicamente en la comunicación con los relevadores Beckwith de las Turbinas, se ha detectado que en estos momentos se tiene en funcionamiento el protocolo Modbus, este se encuentra configurado en el sistema Foxboro Evo (DCS), cuando por Contrato se solicita IEC 61850. Por lo cual solicitamos se hagan las correcciones necesarias para dar cumplimiento al Contrato, así como realizar la verificación en conjunto CFE/SAPI.	172.500,60	0,00	8.131,83	EMPALME obtuvo dos cotizaciones para los trabajos de cierre de esta DM. El menor valor cotizado corresponde a Losnoga ²⁷ , por \$172,500.60 MXN. Se ajusta el valor según cotización del proveedor LOSNOGA del 13 de septiembre de 2021, remitida a EMPALME.
475	Verificar condiciones y realizar las comprobaciones correspondientes a los siguientes instrumentos: 10GCF50CF002 10GCF50CF001 10GBK10CF001 10GCF60CF002 10GCF60CF001 10GUA40CF001 10GUA20CF001 10GBK10CF001	174.341,23	0,00	8.218,60	GPS avala el valor de cierre presentado por el Perito de la CFE, y manteniendo la tasa de cambio usada en peritaje inicial de GPS.
477	Verificar las condiciones de los switches de los enlaces de comunicación 1 y 2, y comprobar que los enlaces de comunicaciones con los equipos paquete esté de acuerdo a la arquitectura del fabricante Schneider.	0,00	0,00	0,00	Cerrada con oficio CSPPS-CCEI-1613-2021 del 19 de octubre de 2021. esta DM no tiene importe económico asociado a su cierre con cargo a EMPALME.
487	Concluir las comprobaciones correspondientes a los sensores de vibración axiales de ambas unidades TG1 y TG2.	118.949,25	0,00	5.607,38	EMPALME obtuvo tres cotizaciones para los trabajos de cierre de esta DM. El menor valor cotizado corresponde a ICIPEM ²⁸ Se ajusta el valor según cotización del proveedor

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
					ICIPEM del 11 de octubre de 2021, remitida a EMPALME.
489	Verificar el funcionamiento de respuesta dinámica del 1%, 3% Y 5% de los GVRC's.	0,00	-9.298,47	-9.298,47	Se ratifica el valor presentado en el Peritaje inicial de GPS, el cual fue calculado según el ponderado acordado con la CFE. La CFE está descontando un monto que ya había sido descontado.
490	Realizar la sintonización final del lazo de control de by pass de media presión.	0,00	-21.219,57	-21.219,57	Se mantiene el valor presentado en el Peritaje inicial de GPS, el cual fue calculado según el ponderado acordado con la CFE. La CFE está descontando un monto que ya había sido descontado.
494	Verificar y comprobar las condiciones de los indicadores luminosos de nivel de los domos AP, MP Y BP DE LOS GVRC1 Y GVRC2, ubicados en cuarto de control, y que las mediciones de campo coincidan con los indicadores locales ubicados en el cuarto de control.	132.400,54	0,00	6.241,48	Se ajusta el valor según cotización del proveedor LOSNOGA ²⁹ del 13 de septiembre de 2021, remitida a EMPALME.
512	Verificar y comprobar que la válvula (10GAC20AA080) a la descarga de la bomba B del sistema de abastecimiento de agua de mar, no presente falla alguna y realizar las comprobaciones correspondientes en automático.	39.857,16	0,00	1.878,90	Se considera el valor del Perito de la CFE, y manteniendo la tasa de cambio del peritaje presentado por GPS.
517	Verificar y comprobar que los controles de carga y presión de TV trabajen en automático sin intervención humana, así mismo que se realicen en automático los cambios de control sin pérdida de potencia en la TV.	198.748,39	0,00	9.369,18	Se ajusta el valor según cotización del proveedor INTIME CONTROL ³⁰ del 29 de septiembre de 2021, remitida a EMPALME.
532	Verificar y realizar las comprobaciones en el sistema conmutador área Site, esté configurado y disponible los equipos telefónicos y conmutador.	55.139,40	0,00	2.599,32	Se ratifica el valor presentado en el Peritaje inicial de GPS.

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
535	Verificar y comprobar que de acuerdo a la sección 7.3.4.2.3.14.3.3 "Características de las estaciones de acceso y explotación de los PMUs de la central a instalarse en el área de control", la estación de operación del PMU sea la correcta, así como los manuales y licencias de usuario, licencias de software para acceso y explotación de los PMUs basado a la norma IEEE 37.118 y el escritorio y silla modular para operador.	13.780,00	0,00	649,60	GPS avala el valor presentado por el perito de la CFE, y aplica la tasa de cambio usada en el peritaje inicial de GPS.
542	Se solicita verificar y comprobar que ya no se cuente con vibraciones en las válvulas de bypass de MP y BP.	0,00	0,00	0,00	* No se considera el descuento incluido invariablemente en el peritaje de GPS
547	Verificar y comprobar que los transmisores de flujo que se enlistan a continuación no se encuentran saturados: · 10LCA40CF001 · 10GHC43CF001	59.600,89	0,00	2.809,64	El soporte entregado por la CFE corresponde a la realización del análisis y diagnóstico de la medición de agua desmineralizada en Empalme I y II. Estos análisis no forman parte de ninguna DM, por lo que el importe declarado por CFE de \$78,000 MXN no es procedente. EMPALME obtuvo dos cotizaciones para los trabajos de cierre de esta DM. El menor valor cotizado corresponde a Losnoga, ³¹ por \$59,600 MXN.
554	Verificar y mejorar el funcionamiento de la comunicación del NODO 2 del PCI (del edificio administrativo al cuarto eléctrico y de control).	195.194,31	0,00	9.201,64	GPS avala el valor de cierre presentado por el perito de la CFE, y aplica la tasa de cambio usada en el peritaje inicial de GPS.
556	Verificar y comprobar la secuencia en automático del Control Maestro, una vez que se hayan reemplazado las siguientes componentes de los equipos que se enlistan a continuación: 1) Sistema de enfriamiento principal (válvula de descarga de la bomba 10PAC11AP001).	3.421,20	0,00	161,28	El concepto del soporte de costo presentado por la CFE no tiene relación con las actividades requeridas para el cierre de esta DM. Se ratifica el valor presentado en el Peritaje inicial de GPS.

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
	2) GVRC2 (la tarjeta electrónica de la válvula de purga del domo de alta presión). 3) TV (válvula 10MAB50AA080 de calentamiento de válvula de paro de media presión).				
558	Verificación del cambio de control en vapor auxiliar (cuando cambia el suministro de vapor de la línea de recalentado frío a vapor principal) cuando se realice la prueba de capacidad de by pass al 100% de carga del Ciclo. Así mismo en el alcance de esta deficiencia menor, se contempla la instalación de una nueva línea de calentamiento con sus válvulas, accesorios y pruebas correspondientes.	280,750.72	0,00	13.234,84	El desglose presentado por la CFE en la Solicitud de exhibición de documentos, bajo el numeral 50 muestra un importe de \$234,617.79 MXN para la DM-558 ESP-C001 por un importe de \$9,423.08 MXN ESP-C002 por un importe de \$12,266.00 MXN ESP-C013 por un importe de \$10,303.26 MXN ESP-C014 por un importe de \$45,797.13 MXN ESP-C017 por un importe de \$12,266.00 MXN ESP-C018 por un importe de \$12,266.00 MXN ESP-C022 por un importe de \$132,296.34 MXN Los conceptos señalados anteriormente no guardan relación con la DM 558; por lo que el importe de \$234,617.79 MXN declarado por la CFE no es procedente. EMPALME obtuvo dos cotizaciones para los trabajos de cierre de esta DM. El menor valor cotizado corresponde a Losnoga ³² , por \$280,750.72 MXN.
559	Verificar y comprobar los cálculos de comportamiento al 50%, 75% y 100% de carga del Ciclo Combinado. La Sección 7.7.1.2.6.3 de las Bases de Licitación habla de los siguientes cálculos: • Consumo térmico unitario del ciclo en tiempo real • Cálculo de estatismo en línea • Régimen térmico por cada unidad • Eficiencia de los GVRC1 y	332.159,37	0,00	15.658,29	Se ajusta el valor según cotización del proveedor INTIME CONTROL ³³ del 29 de septiembre de 2021, remitida a EMPALME.

No. DM	DESCRIPCIÓN DE LA DEFICIENCIA MENOR	SUBTOTAL (MXN)	SUBTOTAL (USD)	TOTAL (USD)	OBSERVACIONES
	GVR2 • Eficiencia de los turbogeneradores de gas • Eficiencia del turbogenerador de vapor por cada etapa de vapor.				
571	Se solicita la entrega de los registros del protocolo de pruebas a los sistemas de control de las TG's (TG1 y TG2).	0,00	0,00	0,00	Las actividades de cierre de esta DM no representan un costo económico para las Partes
	TOTALES	8.606.640,51	475.824,12	881.548,94	

327. Para efectos de la valoración final que proceda, es importante tomar en cuenta que, entre las 48 Deficiencias Menores que se identifican en la Tabla 10 que antecede, las siguientes DM están referidas como “Abiertas” en la tabla que precede a la Tabla 10 en este documento, que muestra el estado de las Deficiencias Menores al 25 de noviembre de 2021, de conformidad con el Dictamen GPS II, su Apéndice No. 1 y el Anexo A-100 del Memorial de Demanda.

Estado de Deficiencias Menores, al 25 de noviembre de 2021

DM No.	Estado según Empalme	Estado según CFE	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021
45	Abierta	Abierta		Abierta	Abierta
49	Abierta	Abierta		Abierta	Abierta
321	Abierta	Abierta		Abierta, pendiente por reprogramación CFE y Covid 19	Abierta
322	Abierta, según Empalme procede	Cerrada por CFE	SÍ	Abierta	Procede, tomar en cuenta valor Reporte GPS II
338	Abierta	Abierta		Abierta	Abierta
345	Abierta	Abierta		Cerrada, aplica DM-329	Abierta
352	Abierta	Abierta	SÍ	Abierta	Abierta
353	Abierta	Abierta	SÍ	Abierta	Abierta
360	Abierta	Cierre posterior		Abierta	
399	Abierta	Abierta	SÍ	Abierta, RPP	Abierta
416	Abierta	Abierta		Abierta, RPP	Abierta
436	Abierta	Abierta	SÍ	Abierta	Abierta
437	Abierta	Abierta	SÍ	Abierta	Abierta
448	Abierta	Abierta	SÍ	Abierta	Abierta
453	Abierta	Abierta	SÍ	Abierta	Abierta
457	Abierta	Abierta	SI	Abierta	Abierta

DM No.	Estado según Empalme	Estado según CFE	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021
474	Abierta	Abierta	SÍ	Abierta	Abierta
475	Abierta	Abierta	SÍ	Abierta	Abierta
487	Abierta	Abierta	SÍ	Abierta	Abierta
517	Abierta	Abierta	SÍ	Abierta	Abierta
532	Abierta	Abierta		Abierta	Abierta
535	Abierta	Abierta	SÍ	Abierta	Abierta
547	Abierta	Abierta	SÍ	Cerrada	Abierta
554	Abierta	Abierta	SÍ	Abierta	Abierta
556	Abierta	Abierta	SÍ	Abierta	Abierta
558	Abierta	Abierta	SÍ	Abierta	Abierta
559	Abierta	Abierta	SÍ	Abierta	Abierta
571	Abierta	Abierta	SÍ	Abierta	Abierta

* Abreviaturas:

DM: Deficiencia Menor

Garantía

Ejecutada: Carta de Crédito HSBC

PFCoP: Problema Flujo de Caja o Pago

SCCC: Sin Cobro a Carta de Crédito

IRP: Imposibilidad de realizar Pruebas, por causas no imputables a Empalme

328. Como antes se mencionó y ambas Partes han reconocido, la Demandada ejecutó la Carta de Crédito HSBC por la cantidad de USD \$13'627,892.00 dólares, moneda de los Estados Unidos de América²²¹, y el Tribunal Arbitral determinó que dicha ejecución fue violatoria del Contrato por las razones antes indicadas, por lo que, en virtud de la notoria improcedencia de la ejecución de la Carta de Crédito HSBC, así como de las circunstancias en que aconteció dicha ejecución, cabría considerar que el monto total por el que la Demandada ejecutó la Carta de Crédito HSBC, es decir la cantidad arriba indicada, constituyó un exceso por parte de la Demandada.
329. No obstante lo anterior, al resolver las cuestiones relativas a la ejecución de la Carta de Crédito HSBC el Tribunal Arbitral también resolvió que dichas cuestiones son independientes de la procedencia o improcedencia de las Deficiencias Menores y de los Reclamos de Garantía controvertidos, así como de las cuestiones inherentes a la atención de los mismos, que serían analizadas por separado, lo cual se hace.

²²¹ Oficio de CFE No. 7B/2020/RJMN-00140, Anexo A-022 al Memorial de Demanda y Anexo D-040 al Escrito de Contestación a la Demanda. En dicho oficio, se cita el oficio No. DCIPI/CFE/062/2020, mediante el cual CFE “requirió el cobro de dicha Garantía por un monto de USD \$13'627,892.00 (Trece millones seiscientos veintisiete mil ochocientos noventa y dos dólares)”, y no fue exhibido por ninguna de las Partes.

330. Tomando en consideración los posicionamientos y argumentos de las Partes de conformidad con sus respectivos memoriales, así como los dictámenes periciales exhibidos con los mismos y los documentos y circunstancias en que dichos peritos sustentaron sus respectivos análisis y conclusiones, y las demás constancias que forman parte del expediente, incluyendo la transcripción de la Audiencia, después del análisis de todo ello el Tribunal Arbitral determina y resuelve lo que se indica en la siguiente tabla en relación con las Deficiencias Menores que han quedado en condición de “Abiertas” de conformidad con las conclusiones del perito de la Demandante contenidas en el Dictamen GPS II, que no fueron desvirtuadas en el procedimiento por razón de materia o concepto, ni de monto.

Estado de Deficiencias Menores, al 25 de noviembre de 2021 y Resoluciones

DM No.	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021	Decisión del Tribunal Arbitral	Valor (USD)
45		Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	151,060.00
49		Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	3,488.43
321		Abierta, pendiente por reprogramación CFE y Covid 19	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	10,080.00
322	SÍ	Abierta	Procede, tomar en cuenta valor Reporte GPS II	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	114,704.00
338		Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	9,525.00
345		Cerrada, aplica DM-329	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	17,939.61
352	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	178,726.61
353	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	1,338.20
399	SÍ	Abierta, RPP	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	7,429.43

DM No.	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021	Decisión del Tribunal Arbitral	Valor (USD)
416		Abierta, RPP	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	6,870.80
436	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	59,591.03
437	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	29,795.51
448	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	4,500.00
453	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	4,500.00
457	SI	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	142,478.55
474	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	8,131.83
475	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	8,218.60
487	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	5,607.38
517	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	9,369.18
532		Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	2,599.32
535	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	2,809.64
547	SÍ	Cerrada	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	2,809.64
554	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS I I	9,201.64

DM No.	Garantía Ejecutada*	Conclusión GPS I al 05 febrero 2021	Conclusión GPS II al 25 noviembre 2021	Decisión del Tribunal Arbitral	Valor (USD)
556	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS II	161.28
558	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS II	13,234.84
559	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS II	15,658.29
571	SÍ	Abierta	Abierta	El valor de esta DM se determina conforme a la Tabla 10 del Reporte GPS II	Las actividades de cierre de esta DM no representan costo económico para las Partes

331. A continuación, el Tribunal Arbitral procede al análisis de la Deficiencia Menor DM-331, que amerita un análisis especial.

DM-331

Antecedentes

332. La Demandante hace un análisis especial respecto del caso DM-331, derivado del monto que representa la reclamación de CFE.²²² Esta DM trata de altas vibraciones detectadas por CFE en la chumacera de la turbina de vapor, que Empalme señala serán transitorios en el arranque o apagado de la turbina; se encontraban dentro de los márgenes aceptables definidos por el fabricante, y no causaron daño alguno.

333. El análisis individual de la DM-331 se justifica, en efecto, por la especial relevancia que las Partes plasmaron al tema en sus escritos, y la presentación de un dictamen o informe particular, así como la atención expuesta durante la Audiencia. Todo ello se justifica, naturalmente, en razón del valor de la alegada Deficiencia. Según la Demandante, la Demandada ha

²²² El reclamo asciende a \$19,977,969.18 M.N. y USD \$4,088,772.61, según se detalla en el Dictamen Pericial Ing. Cámara Anzures, ¶ 259.

manifestado que erogó \$206,839,387.68 M.N. en atención a los trabajos que CFE realizó de desarmado, desmontaje e inspecciones de la Turbina de Vapor con apoyo de Doosan Škoda Power s.r.o (“Doosan Skoda”) y/o de Turbopartes y Servicios Especializados S.A de C.V. (“Turbopartes”) con el producto de la ejecución de la Carta de Crédito HSBC.²²³

334. Según señaló CFE en su notificación de la Deficiencia,²²⁴ esta consiste en:

“ALTA VIBRACION en chumacera 2 de la TV, se tienen valores de vibración que superan los valores de alarmas en el incremento de velocidad (valores 250 micras), y en el decremento alcanza valores muy superiores al disparo (valores 400 micras), en velocidad alrededor de 1800 rpm.

“La misma se encuentra en controversia. CFE sostiene que los valores no cumplen con las normas aplicables, mientras que EMPALME considera que los mismos están fuera del alcance del Contrato, pues las normas que indican el estándar de valores son posteriores a la firma del Contrato.

“GPS en su análisis concluye que la norma a la que hace referencia CFE es posterior a la aplicable a la firma del Contrato, por lo que se encuentra fuera del alcance del Contrato, debiéndose considerar la misma como cerrada.”

Posición de CFE

335. La Demandada sostiene que durante el proceso de puesta en servicio de la turbina de vapor U3 del CC Empalme I, se detectó durante los rodados, ascenso y descenso de velocidad de la turbina, que los valores de vibración registrados en la chumacera No. 2, habían sobrepasado el 25% del límite de alarma establecido para el turbogenerador de acuerdo a la Norma ISO 20816-2:2017,²²⁵ que comunicó a la Demandante desde el 12 de mayo de 2018 los niveles de vibración presentados durante los incrementos y decrementos de velocidad, y requirió una respuesta técnica y por escrito por parte del proveedor del equipo Doosan Skoda, a fin de garantizar la confiabilidad de la operación de la turbina de vapor.

336. Al decir de la Demandada, nuevamente en el mes de septiembre de 2018 se observó, al hacer un análisis dinámico al turbogenerador TV, que los valores de vibración sobrepasaron los límites de alarma establecidos por el fabricante Doosan Skoda durante el paso por la velocidad crítica, así como superando los límites establecidos por la Norma ISO 20816-2:2017 para dicha velocidad crítica, particularmente en la chumacera No. 2 lado rotor media presión.²²⁶

337. Por otra parte, la Demandada manifiesta que el costo de la atención de la DM-331 “... *resultó más onerosa de lo que estaba presupuestada, debido a que en la atención de dicha Deficiencia se detectaron hallazgos referentes, principalmente, a daños en los sellos que implicaron*

²²³ Dictamen Pericial Ing. Cámara Anzures, pag. 31, Memorial Pre-Audiencia, ¶ 103.

²²⁴ Contestación a la Demanda, ¶ 518.

²²⁵ Contestación a la Demanda, ¶ 519.

²²⁶ Contestación a la Demanda, ¶ 526

mayores gastos a los originalmente previstos.”²²⁷ Agrega que, en respuesta, la Demandante le indicó que en base a una comunicación del fabricante los valores presentados de vibración en la turbina de vapor cumplían con lo estipulado en la Norma ISO 7919 establecida contractualmente,²²⁸ y que se daría un mantenimiento al equipo para reducción de los niveles de vibración.

338. Cuando las Partes suscribieron el Certificado de Aceptación Provisional el 26 de marzo de 2019, incluyeron un listado de Deficiencias Menores que debían ser atendidas por Empalme dentro de los sesenta (60) días siguientes. Se incluyó en dicho listado a la DM-331. La Demandada manifiesta que, sin realizar acción alguna con respecto a esta deficiencia, la Demandante solicitó el cierre argumentando que los valores de vibración presentados se encuentran acorde a la norma contractual conforme a lo indicado en comunicación previa.²²⁹
339. Posteriormente, en el mes de junio de 2019, la Demandada comunicó a la Demandante que *“...en caso de presentarse cualquier tipo de daños a la turbina de vapor, como consecuencia de las altas vibraciones que presenta la turbina, será completamente responsabilidad de este último ...”*.²³⁰
340. La Demandada sostiene que, en virtud de que no obtuvo respuesta por parte de Empalme sobre el seguimiento de atención a la DM-331 y su “inamovible postura” para atenderla, la Comisión procedió a ejecutar la Garantía de Cumplimiento de conformidad con lo establecido en la Cláusula 11.3 del Contrato.²³¹
341. En este sentido, sostiene que, al momento de la ejecución de la Carta de Crédito HSBC, los trabajos necesarios para la atención de la DM-331 únicamente habrían implicado el balanceo de la turbina de vapor de alta presión durante un paro programado conforme al procedimiento No. MS-2018-012 “Method Statement” entregado por Empalme y emitido por el fabricante, Doosan Skoda.²³² Es así que hizo contacto con dicho fabricante en el mes de abril de 2020.
342. En el mes de abril de 2020 la Demandada solicitó de LAPEM (Laboratorio de Pruebas de Equipos y Materiales, de CFE) realizar un análisis dinámico de la turbina de vapor relacionado con (i) problemática de expansión diferencial en la turbina de alta presión (Desplazamiento diferencial rotor turbina alta presión), y (ii) alta vibración presente en el ascenso y descenso de velocidad de TV, quien reportó que existía un desbalance.²³³ Posteriormente, el 29 de

²²⁷ Contestación a la Demanda, ¶ 210.

²²⁸ Ver Anexos D-242 y D-245.

²²⁹ Ver comunicado No. CFE-P0M27039-C-EPCDP-CFE-0354. Anexo D-245.

²³⁰ Contestación a la Demanda, ¶ 537, haciendo referencia al oficio CSPPS/CCEI-985/2019 de fecha 13 de junio de 2019 (Anexo D-248).

²³¹ Contestación a la Demanda, ¶ 545.

²³² Contestación a la Demanda, ¶ 549.

²³³ Ver Anexo D-261 – Informe de Trabajos realizados por Turbopartes TV.

agosto de 2020 la Demandada tomó la decisión de poner fuera de servicio la turbina de ciclo combinado de manera segura para, al decir de la Demandada, evitar posibles daños en los componentes de la turbina de vapor de AP y MP derivados del desplazamiento axial y de las vibraciones, así como para dar inicio con la rehabilitación y corrección con asistencia técnica del fabricante (Doosan Skoda).²³⁴

343. La Demandada relata que se realizaron los trabajos a partir del mes de octubre de 2020, y al realizar un desmontaje del rotor se identificaron daños en las láminas de sellos en entrepasos como en secciones delanteras y traseras de sellos de vapor. LAPEM inspeccionó “... *los pernos de la junta horizontal de la carcasa exterior de alta y media presión, observando indicios de corrosión en 8 pernos de la carcasa exterior de alta presión y en 21 de los pernos de la carcasa exterior de media presión, dictaminándolos como rechazados.*”²³⁵
344. Ante dicha situación, la Demandada contrató a Turbopartes para la realización de trabajos en taller y armado de la turbina de vapor, empresa que según la Demandada cuenta con acuerdo tecnológico y comercial con Doosan Skoda para llevar a cabo este tipo de trabajos.²³⁶
345. Una vez realizadas las pruebas de puesta en servicio, la Demandada indica que la turbina de vapor regresó a operación y la Central quedó a disposición del CENACE, y que ya no ha presentado vibraciones fuera de norma.²³⁷
346. En el Memorial de Cierre CFE, la Demandada critica el Informe Lapee, pues señala que omitió realizar un análisis propio de causa raíz, con el cual determinara si esas causas identificadas por terceros eran suficientes, o bien, existieron otras causas por las cuales una turbina nueva presentara estas vibraciones, y adicionalmente, un desplazamiento del eje causado por sellos severamente dañados y qué relación guardaban entre estos fenómenos.²³⁸
347. CFE concluye señalando que el Informe Lapee omitió aspectos fundamentales que permiten deslindar responsabilidad, ya que, al amparo del Contrato, la Demandante es total responsable del “... *suministro, transporte, montaje y puesta en servicio y resguardo de la Turbina de Vapor, por lo que aún y cuando este daño hubiese sido originado en la fabricación de la Turbina de Vapor, Empalme es total y único responsable de la problemática de Desplazamiento Axial*”, añadiendo que en el Reporte Causa Raíz emitido por Doosan Skoda se señala que las altas vibraciones fueron ocasionadas por diversas razones durante su montaje, y que esta fase es responsabilidad de la Demandante.²³⁹

²³⁴ Contestación a la Demanda, ¶¶ 558-561.

²³⁵ Contestación a la Demanda, ¶ 566.

²³⁶ Contestación a la Demanda, ¶ 567, indicando que el número de Contrato es el 800951583).

²³⁷ Contestación a la Demanda, ¶¶ 576-579

²³⁸ Memorial de Cierre CFE, ¶ 99.

²³⁹ Memorial de Cierre CFE, ¶¶ 101-102.

348. La Demandada no presentó dictamen o informe pericial al respecto, pero acompañó las Testimoniales de los Ingenieros Ventura Sánchez Gutiérrez²⁴⁰ y Oswaldo Vera Sotelo,²⁴¹ quienes, sostiene “*atestiguaron cada una (sic) de los hechos antes narrados, así como las reparaciones realizadas por la empresa Doosan Skoda.*”²⁴²

Posición de Empalme

349. En su Memorial de Demanda, la Demandante señaló que, contrario a lo que sostiene la Demandada, los valores que CFE alega no cumplen con las normas aplicables están fuera del alcance del Contrato, pues las normas que indica el estándar de valores son posteriores a la firma del Contrato.²⁴³
350. La Demandante sostiene que las Partes y representantes de Doosan Skoda tuvieron una reunión el 23 de octubre de 2018 en la cual Doosan Skoda confirmó a CFE que la turbina de vapor cumplía con todas las especificaciones contractuales y legales aplicables y, que, el nivel de las vibraciones ameritaba únicamente que se levantara una alarma pero no llegaban a un nivel que fuera a impedir el funcionamiento correcto de la Turbina de Vapor.²⁴⁴ Agrega que, posterior a dicha reunión, Doosan Skoda dirigió una carta a Empalme mediante la cual sostuvo expresamente que “*el estado actual de la turbina de vapor y el generador permitirá la operación en alcance completo sin problemas, confiable y válida para los fines del Proyecto*”, así como otras similares confirmando el punto²⁴⁵ y que Empalme entregó copias de dichas comunicaciones a CFE.²⁴⁶
351. La Demandante señala que el Perito Chris Lappee realizó un análisis detallado del reporte²⁴⁷ concluyendo que: (i) CFE no demuestra daños que pudiesen haber sido ocasionados por EMPALME pues ellos habrían sido visibles durante las primeras semanas de octubre (periodo del que no se cuenta con evidencias fotográficas); y (ii) el reporte elaborado por Turbopartes “*... contiene inconsistencias y exageraciones fabricadas a efecto de hacer creer que las vibraciones causaron los daños reclamados por CFE*”.
352. Por otra parte, la Demandante sostiene que para determinar la “verdadera causa” de los daños reclamados por la Demandada, Doosan Skoda emitió un nuevo dictamen en 2021 (*i.e.* posterior a las actividades llevadas a cabo con CFE), el cual concluyó que la verdadera causa

²⁴⁰ Anexo DT-001 de Contestación a la Demanda.

²⁴¹ Anexo DT-002 de Contestación a la Demanda.

²⁴² Contestación a la Demanda, ¶ 586

²⁴³ Contestación a la Demanda, ¶ 433.

²⁴⁴ Memorial Pre-Audiencia Empalme, ¶ 106, citando la Declaración Testimonial de Ved Pandit, ¶ 9-10 (Anexo AT-004)

²⁴⁵ Memorial Pre-Audiencia Empalme, ¶¶ 106-108.

²⁴⁶ Memorial Pre-Audiencia Empalme, ¶ 109.

²⁴⁷ Ver Anexo AP-003, Informe Lappee, sección 9 (Conclusiones).

del desplazamiento axial se debe a una fuga que no se encuentra relacionada con las altas vibraciones como infundadamente alega CFE.²⁴⁸

353. Sin perjuicio de lo anterior, la Demandante cuestiona la participación de Doosan Skoda en los trabajos tal y como fueron expuestos por CFE, ya que indica que la CFE adjudicó un contrato a dicho fabricante apenas el 29 de octubre de 2021, según consta en el documento que acompaña,²⁴⁹ lo que sugiere, entre otros escenarios que presenta, que CFE hizo las intervenciones que intenta vincular a la DM-331 sin contar con un Reporte de Causa Raíz; o que el Reporte Causa Raíz que exhibió CFE en este proceso arbitral²⁵⁰ “... *no fue el definitivo o está elaborado de manera sesgada y bajo las instrucciones de CFE intentando solapar las deficiencias en la operación de la Turbina de Vapor por parte de CFE e intentando forzosamente vincular las adecuaciones realizadas con la DM-331, que como ya ha sido demostrado no guardan relación alguna*”.²⁵¹
354. Durante la Audiencia, la Demandante reclamó que el Reporte de Causa Raíz preparado por Doosan Skoda, si bien había sido emitido desde el 11 de marzo de 2021, CFE negó su existencia durante el proceso de producción de documentos y sólo entregó una copia a la Demandante hasta el 1 de noviembre de 2021, después de que había reclamado su entrega.²⁵²
355. Por lo anterior, concluye la Demandante en señalar que la Demandada tenía la carga de probar que los supuestos daños fueron causados por Empalme y, sin haberlo logrado, debe considerarse la DM-331 como “Cerrada”.²⁵³

Análisis del Tribunal Arbitral

356. Durante la Audiencia el Tribunal tuvo oportunidad de escuchar la presentación de los peritos designados por las Partes para opinar sobre el tema, y el examen de sus dictámenes e informes presentados previamente durante el procedimiento:

(a) Chris Lappee (CLUE Consultancy), el 17 de febrero de 2022

(b) Ing. José Lorenzo Cámara Anzures, el 17 de febrero de 2022.

²⁴⁸ Informe Lappee, sección 5.6, ¶ 225, en el que manifiesta que no existe correlación alguna entre las vibraciones del rotor y el desplazamiento axial negativo, por lo que evidentemente la DM-331 no fue la causa del desplazamiento axial. (“*No existe correlación alguna entre las elevadas vibraciones relativas del eje en la sonda SV3-X y el desplazamiento axial negativo. Así que, obviamente, el DM-331 no era la causa del desplazamiento axial negativo*”).

²⁴⁹ Anexo A-106 - Adjudicación Doosan octubre de 2021.

²⁵⁰ Anexo A-103 - Dictamende Causa Raíz Doosan de 11 de marzo de 2021.

²⁵¹ Memorial Pre-Audiencia Empalme, ¶ 113.

²⁵² LCIA 204661, 14-02-2022 (1ª. Parte). Ver carta del 4 de octubre de 2021 dirigida por los representantes de Empalme al Tribunal Arbitral.

²⁵³ Memorial de Cierre Empalme, ¶ 25.

357. El Tribunal identifica que, a pesar de que la DM-331 reportada por CFE a la Demandante en el mes de diciembre de 2019, se refiere a una “alta vibración en la chumacera 2 de la turbina de vapor”, durante el curso del procedimiento la Demandada amplió su pretensión a que dicha vibración había provocado un desplazamiento axial. Es por ello que el Tribunal analiza abajo ambas problemáticas, que la Demandada alega constituyen DMs.

Vibraciones

358. La DM-331 está relacionada con las vibraciones que se dan exclusivamente durante un periodo transitorio en el proceso de incremento (*run up*) o decremento (*run down*) de velocidad (*rpm*’s o revoluciones por minuto) de la turbina de vapor –en particular, durante el paso por la velocidad crítica de 1,800 rpm- tema que la Demandada reconoce que se elimina una vez que la turbina alcanza la velocidad de operación estable.
359. Cuando la CFE notificó a la Demandante la DM-331 en el mes de octubre de 2018, Empalme contrató al fabricante de la turbina (Doosan Skoda) para que hiciera un análisis de las vibraciones reportadas y los efectos que podría causar. Fue así que esta empresa presentó un reporte²⁵⁴ en el que manifestó que “*las condiciones de la turbina y generador permitiría una operación sin problemas de amplio rango, en forma confiable y válida para los propósitos del Proyecto*”,²⁵⁵ agregando que “*consideraba que la operación de la turbina de vapor se encontraba totalmente capaz [de operar] conforme a las especificaciones y requerimientos en términos de vibración*”.²⁵⁶
360. Estas manifestaciones las volvió a realizar Doosan Skoda en una comunicación posterior del 7 de noviembre de 2018, redactada en español: “...[Doosan Skoda] declara, que el estado actual de la turbina de vapor y el generador permitirá la operación en alcance completo sin problemas, confiable y válida para los fines del proyecto” y “[Doosan Skoda] como fabricante de la turbina de vapor considera el funcionamiento de la misma como completamente capaz de acuerdo con las especificaciones contractuales y los requisitos en términos de vibración”²⁵⁷ Las especificaciones contractuales quedaban satisfechas.²⁵⁸
361. Nuevamente, el 16 de noviembre de 2018 Doosan Skoda emitió un reporte dirigido a Empalme a través del cual confirmó sus conclusiones anteriores, y al final concluyó que: “*DSPW como fabricante de la turbina de vapor considera el funcionamiento de la misma como completamente capaz de acuerdo con las especificaciones contractuales y los requisitos en*

²⁵⁴ Anexo D-242 a Contestación a la Demanda – Carta del 9 de octubre de 2018 dirigida por Doosan Skoda a Emplame.

²⁵⁵ En inglés: “...the current status of the steam turbine and generator will allow trouble free full range of the operation, reliable, and valid for the purpose of the Project”.

²⁵⁶ En inglés: “[DPSW] considers operation of the steam turbine as a fully capable according contractual specification and requirements in terms of vibration”.

²⁵⁷ Memorial de Demanda, Anexo AT-004, Anexo 2

²⁵⁸ Memorial de Demanda, Anexo AP-003, ¶ 98.

*términos de vibración. La turbina está diseñada para soportar disparos a máxima carga de turbina auaque (sic) esto no sea una condición de operación normal”.*²⁵⁹

362. Posteriormente, y ahora a solicitud de CFE, Doosan Skoda realizó un análisis de “causa raíz de las vibraciones” de fecha 11 de marzo de 2021²⁶⁰ –aproximadamente un año y medio después de las comunicaciones antes citadas– en el cual llega a las siguientes conclusiones:²⁶¹

- (a) *“La turbina se entregó desde el taller de fabricación completamente ensamblada, correctamente alineada, inspeccionada incluyendo protocolos y certificados relevantes. La turbina cumple completamente con los requisitos del cliente, las vibraciones de la turbina en FSNL (A toda velocidad y no carga) o con cualquier carga era enteramente en la zona A según la norma ISO, como fue solicitado por el cliente. Las vibraciones solo fueron reclamados (sic) para “run up” y “run down” sin embargo es un comportamiento normal de la turbina durante un modo transitorio de operaciones, pasando la velocidad crítica y el estándar relevante no especifica ningún valor de vibración para tales modos de operación y la turbina fue fabricada de acuerdo con las mejores prácticas;*
- (b) *“El efecto de las supuestas vibraciones durante “run up” y “run down” se originan por varias razones, sobre todo el alineamiento para la operación, el acoplamiento final o combinación de todo anterior. Dados los hechos presentados en este documento, estamos de opinión de expertos que las supuestas vibraciones originaron por razones fuera del alcance de DSPW, con mayor probabilidad por los trabajos del montaje realizados por tercera parte”; y*
- (c) *“Después de la alineación final y adecuada realizada por DSPW utilizando su mejor práctica de calidad, la turbina esta funcionando con valores de vibraciones significativamente más bajas durante “run up” y “run down” y así confirma que los vibraciones originaron (sic) por los trabajos del montaje realizados por tercera parte”.*

363. Durante la Audiencia el tema de la DM-331 fue fuertemente debatido entre las Partes. No estuvo presente representante alguno del fabricante, pero toda vez que la Demandante había ofrecido el dictamen pericial del Sr. Chris Lappee de CLUE,²⁶² éste fue llamado a ser examinado. Después de hacer una presentación de su informe, lo contra-interrogaron a detalle los representantes de la Demandada.

²⁵⁹ Anexo DP-001, Anexo 28.

²⁶⁰ Anexo A-103 – Doosan Skoda, Reporte Técnico Final – Análisis de Causa Raíz, RCA-Español [11603]

²⁶¹ Anexo A-103 – Doosan Skoda, Reporte Técnico Final – Análisis de Causa Raíz, RCA-Español [11603], pág. 18

²⁶² Ver Anexo AP-003, Informe Lappee.

364. El perito Lappee manifestó en la Audiencia que:²⁶³

- (a) el aumento de las vibraciones durante el paso de la velocidad crítica es un fenómeno normal de los equipos;
- (b) este fenómeno está calculado en la fase de diseño básico;
- (c) la situación solamente acontece durante ascenso y descenso de velocidad (arranque o paro) y es superada en un tiempo máximo de 2 minutos;
- (d) no existe evidencia de daño causado; y
- (e) no existe correlación alguna entre las vibraciones y el desplazamiento axial.

365. El Tribunal toma nota de que, si bien los límites contractuales se establecen en base a un estado de funcionamiento estable, el fabricante ha confirmado que las vibraciones presentadas en la turbina de vapor durante incremento y decremento de velocidad eran aceptables y no causaban daño alguno a la turbina.

366. Además, el Tribunal toma en cuenta que Empalme propuso oportunamente la realización del balanceo de la turbina de vapor durante un paro programado conforme al procedimiento No. MS-2018-012 “Method Statement” emitido por el fabricante, Doosan Skoda, pero la CFE decidió no realizarlo.

367. En los propios reportes de LAPEM encomendados por la Demandada se indicó, con base en la norma ISO 20816-2:2017, que se debían de aplicar diferentes límites a los adoptados para condiciones estables durante arranque, paro y sobre velocidad, así como que los límites debían establecerse con base en la experiencia que se tuviera durante estas circunstancias con el equipo particular.²⁶⁴

368. Además, el Tribunal toma nota de que Doosan Skoda confirmó que, después de una alineación final realizada, la turbina de vapor funciona con valores de vibración significativamente más bajos.

369. Por otra parte, es un hecho que la DM-331, según fue oportunamente notificada por CFE a la Demandante, se restringía a las vibraciones identificadas durante el proceso de incremento (*run up*) o decremento (*run down*) de velocidad de la turbina. No se mencionó el tema del desplazamiento axial. No fue sino hasta tiempo después, cuando se realizó un mantenimiento a la turbina de vapor, que se identificó la causa del desplazamiento. Que no resultó ser de modo alguno las vibraciones en el equipo.

²⁶³ Ver Anexo AP-003 - Informe Lappee, y Presentación de Audiencia de CJM Lappee 20220217 1330WET, pag. 2 y Transcripción Día 4, Transcripción 17-02-2022 (1a Parte), pag. 18.

²⁶⁴ Ver Anexos D-2441 y D-246.

370. Al no existir correlación alguna entre las vibraciones detectadas del eje y el desplazamiento axial negativo, el Tribunal concluye que tales vibraciones no resultaron ser la causa del desplazamiento axial.

Desplazamiento Axial

371. Un tema independiente resulta ser el desplazamiento axial negativo que alega la Demandada. La Demandada señaló que se trata de una expansión diferencial en la turbina de alta presión (desplazamiento diferencial del rotor turbina de alta presión), y que la Demandante es responsable. Lo que es un hecho es que ese desplazamiento requirió finalmente de una “inevitable” intervención de mantenimiento y rectificación.
372. El desplazamiento axial ocurre cuando la carcasa exterior y el rotor se expanden con motivo del calentamiento por vapor, pero el desplazamiento axial negativo resulta cuando la carcasa exterior se expande más que el rotor.
373. En su Informe de Causa Raíz, Doosan Skoda identifica las posibles causas:²⁶⁵
- (a) un golpe a la carcasa durante su manipulación, transporte o montaje u otro daño causado por un tercero;
 - (b) parámetros de vapor incorrectos durante la operación de la turbina (como podrían ser cambios inadmisibles de parámetros o tendencia de temperatura provocada por vapor);
 - (c) una pureza de vapor incorrecta (sea mecánica y/o química) durante la operación, que podría dificultar el movimiento libre de los anillos y, por tanto, iniciar grietas en la tubería debido a la tensión térmica; y
 - (d) Una combinación de las anteriores.
374. Sostiene Doosan Skoda que el aumento gradual de la temperatura de la carcasa exterior “... fue causado por la extensión de drenaje dañada ... utilizada para drenar la entrada tangencial inferior ...” de la turbina” y concluye que “La causa raíz de la degradación observada del desplazamiento del rotor AP fue una fuga de vapor interna creciente, debido a una tubería de extensión de drenaje dañada, de la parte inferior de la entrada tangencial AP, afectando crecientemente (sic) a la temperatura de la carcasa exterior de AP y provocando su expansión absoluta para elevarse en consecuencia.”²⁶⁶

²⁶⁵ Anexo A-103 - Reporte Técnico Final Doosan Skoda – Análisis de Causa Raíz, RCA-Español [11603], pags. 8-9.

²⁶⁶ Anexo A-103 - Reporte Técnico Final Doosan Skoda, *idem*, pag. 9

375. El Informe de Doosan Skoda no está bajo discusión entre las Partes. Lo que está bajo discusión es quién tiene responsabilidad sobre la fuga de vapor. CFE sostiene que las distintas razones que señala el fabricante se atribuyen a actos durante su montaje, y que esta fase era responsabilidad de la Demandante.
376. Sin embargo, la Demandada no ha acreditado que los daños causados hayan sido provocados por la Demandante al momento de montaje de la turbina de vapor.

Atención de los Reclamos de Garantía

Antecedentes

377. Los Reclamos de Garantía (o RGs) se contemplan en la Cláusula 20.1 del Contrato, y se definen como aquellos Defectos en la Obra “... *que resultaren de las mismas, por vicios ocultos, y de cualquier otra responsabilidad en que hubiere incurrido [Empalme], en los términos señalados en el presente Contrato y en el Código Civil Federal.*” La obligación de responder por ellos estará vigente “*a lo largo del Periodo de Garantía*”.²⁶⁷
378. Tomando en cuenta el procedimiento establecido en el Contrato, la Demandante señala que el 21 de febrero de 2019 hizo entrega a la CFE del Procedimiento de Gestión de Reclamos de Garantía para el Ciclo Combinado (“Procedimiento de Gestión de RGs”)²⁶⁸ que tenía como objeto establecer un procedimiento para la gestión de las reclamaciones de garantía de los equipos e instalaciones responsabilidad de la Demandante durante el Periodo de Garantía de la Central.²⁶⁹ En dicho documento se establecieron el procedimiento de notificación de apertura de RGs, el esquema de recepción y análisis de RGs, la resolución de RGs procedentes y la notificación de cierre de los mismos.²⁷⁰
379. La Demandante también aclara que en dicho Procedimiento de Gestión de RGs se precisó que la garantía se encontraba limitada conforme a la Cláusula 20.9 del Contrato y que no aplicaba de modo alguno a suministros adicionales y a modificaciones de alcance solicitados con posterioridad a la fecha de la emisión del Certificado de Aceptación Provisional.
380. Conforme al Procedimiento de Gestión de RGs, todos los RGs iniciarían mediante oficio dirigido por CFE al Responsable de Garantía de la Demandante, aportando toda la

²⁶⁷ En su Memorial de Demanda, la Demandante aclara que, de conformidad con la Cláusula 20.9 del Contrato, existen otros conceptos que están fuera de la Garantía Operativa, entre los que se encuentran los Defectos o Desperfectos en la Central, las Obras o los Materiales causados por el uso y desgaste normal, por la operación o mantenimiento inadecuado de la Central, así como por negligencia o alteraciones no autorizadas a las Obras o Materiales. Ver ¶ 658.

²⁶⁸ Anexo A-089, CFE-P0M27039-EPCP-PR-01230 PROCEDIMIENTO GESTION RECLAMOS GARANTIA PARA EL CC FINAL.

²⁶⁹ Memorial de Demanda, ¶ 659.

²⁷⁰ CFE-P0M27039-EPCP-PR-01230, Procedimiento de Gestión de RGs, págs. 6 y 7.

información/documentación requerida, y solicitando la evaluación y atención por parte de Empalme por medio del formato correspondiente. Una vez realizado el análisis correspondiente, el Responsable de Garantía de la Demandante determinaría la procedencia o improcedencia del RG y, en caso de procedencia, establecería una propuesta de solución y de programa de atención, mismo que debía ser acordada con CFE. Posteriormente, se realizaría la reparación, según lo acordado.²⁷¹

381. Una vez realizados los trabajos para la reparación y comprobaciones correspondientes, el Responsable de Garantía de CFE devolvería el RG firmado como “cerrado”. En caso de que CFE no enviase el RG firmado, el Responsable de Garantía de la Demandante enviaría una comunicación dando por cerrado el RG, pudiendo CFE presentar sus observaciones a dicho cierre durante el transcurso de los siguientes 14 Días.²⁷² Sin embargo, según lo estableció el Procedimiento de Gestión de RGs, en caso de no recibir respuesta de CFE, “*el RG se dará por cerrado*”.²⁷³ Esto es, en caso de silencio por parte de CFE se tendría por cerrado “automáticamente”.²⁷⁴ Por lo tanto, las Partes del Contrato contemplaron la posibilidad de dos opciones para el cierre de RGs: (a) RGs “cerrados” por actos realizados por las Partes, y (b) RGs con “cierre automático”.
382. Por otro lado, en el caso de un RG que sido “cerrado en forma automática”, el Procedimiento de Gestión de RGs dispone que: “*Ante el rechazo de un RG, CFE tendrá 7 días para responder al Contratista por escrito su desacuerdo. Cuando el Contratista no reciba notificación por escrito en el plazo indicado, se interpretará la aceptación de CFE, por lo que el RG quedará Rechazado definitivamente*”.²⁷⁵
383. A lo largo del Periodo de Garantía (y un plazo posterior que se encuentra en controversia entre las partes), la Demandada presentó un total de 256 RGs.²⁷⁶

Posición de Empalme

384. La Demandante pone énfasis en el Procedimiento de Gestión de RGs que las Partes acordaron al incorporar referencia a él en el Acta de Aceptación Provisional, por lo que sostiene que es “*indiscutible el carácter vinculante del Procedimiento de Gestión de RGs acordado*”.²⁷⁷

²⁷¹ Memorial de Demanda, ¶ 660.

²⁷² Conforme a la definición de “Día” en el Contrato (Cláusula 1.1) significa un día natural o calendario. “Día Hábil”, por el contrario, significa para efectos del Contrato, “*cualquier Día, excepto aquéllos que sean considerados como de descanso obligatorio por la Ley Federal del Trabajo de México o por convenios laborales entre la Comisión y el SUTERM*”.

²⁷³ Procedimiento de Gestión de RGs, p. 17

²⁷⁴ Memorial de Demanda, ¶ 661.

²⁷⁵ Memorial Pre-Audiencia Empalme, ¶ 119.

²⁷⁶ Anexo A-100 (Tabla estatus DMs y RGs)

²⁷⁷ Memorial Pre-Audiencia Empalme, ¶ 115.

385. En tal sentido, la Demandante agrega que CFE ignora el contenido del Procedimiento de Gestión de RGs al desconocer el alcance y definición de lo que constituye un RG, tanto bajo el Contrato como bajo el Procedimiento de Gestión de RGs. Además, la Demandante acusa a la Demandada de ser omisa en realizar pronunciamiento alguno sobre los casos en los que se actualizó el rechazo definitivo de los RGs, así como las razones por las cuales no procedería el cierre automático de los RGs bajo dicha categoría.²⁷⁸
386. Empalme señala que la Demandada trata de convertir el debate sobre estos RGs en uno de carácter técnico, cuando la realidad es que, por virtud de lo acordado por las Partes, dichos RGs se encuentran cerrados o rechazados de manera definitiva independientemente de su justificación técnica.²⁷⁹
387. La Demandante sostiene²⁸⁰ que solamente quedó obligada bajo el Contrato a atender –durante el Periodo de Garantía– los “Defectos” que resultaren por concepto de vicios ocultos o por las responsabilidades en que pudiere haber incurrido en términos del Contrato o del Código Civil Federal. En los términos de la Cláusula 1.1 del Contrato los “Defectos” deben constituir un *“hecho, condición o evento que afecte una Obra o parte de la misma, y que haga o pueda hacer que dicha Obra no sirva a su propósito o función, sea total o parcialmente”*.²⁸¹ Además, dicho hecho, condición o evento, debe derivar de (i) vicios ocultos o (ii) el incumplimiento de Empalme a una obligación contractual.
388. Otra limitante a la responsabilidad que apunta la Demandante, surge de la Cláusula 20.9 del Contrato, conforme a la cual la Demandante no será responsable, entre otras cosas, por Defectos *“que sean causados por el uso y desgaste normal, por la operación o mantenimiento inapropiado o inadecuado de la Central”*.²⁸²
389. En su Memorial de Cierre, la Demandante cataloga a los RGs como sigue:²⁸³
- a) Cierre Automático y rechazo definitivo (un total de 68). Correspondientes a aquellos que habrían sido cerrados o rechazados por EMPALME sin que CFE manifestara su desacuerdo dentro de los términos previstos en el Procedimiento de Gestión de RGs. Deben considerarse “cerrados”;
 - b) Rechazados (un total de 85). Fueron rechazados por no encajar en la definición de RG conforme al Contrato; esto es, rechazados por no constituir un defecto o vicio

²⁷⁸ Memorial Pre-Audiencia Empalme, ¶ 116.

²⁷⁹ Memorial Pre-Audiencia Empalme, ¶ 116, y Memorial de Cierre Empalme, ¶ 30.

²⁸⁰ Memorial Pre-Audiencia Empalme, ¶ 122.

²⁸¹ El término “Defectos” se encuentra así definido en la Cláusula 1.1 del Contrato.

²⁸² Memorial Pre-Audiencia Empalme, ¶ 123.

²⁸³ Tabla acompañada como prueba A-100.

oculto o estar repetido con otro RG o DM. Deben considerarse igualmente “cerrados”;

- c) Rechazados posterior el 9 de junio de 2019 (un total de 79). Toda vez que fueron presentados posteriormente a la vigencia de la Garantía Operativa. Estos RGs son improcedentes y deben considerarse también “cerrados”;
- d) Abiertos (un total de 9). Corresponde a trabajos por los que la Demandante acepta su responsabilidad y, por lo tanto, han sido valorizados en la sección 10.1.2 del Dictamen GPS II para su cierre; y
- e) En Controversia (un total de 9). Aquellos que corresponden a RGs que la Demandante considera “cerrados”, en tanto que CFE considera “abiertos”.

390. La Demandante que la reclamación de todos los RGs rechazados es improcedente por no cumplir con los requisitos aplicables bajo el Contrato y el Procedimiento de Gestión de RGs.

391. Además, la Demandante señala que aportó como prueba el Análisis Técnico GPS Reclamos de Garantía, que forma parte del Dictamen GPS II como Apéndice No. 02.²⁸⁴ Al decir del perito GPS, CFE no justificó la procedencia de la totalidad de los RGs y el perito Ing. Cámara Anzures sólo analizó en su dictamen 8 de 82 RGs que CFE reclama como “Abiertos”.²⁸⁵

RGs Atendidos y “Cerrados”

392. La Demandante relata en su Memorial de Demanda²⁸⁶ que existieron 37 RGs que fueron notificados por CFE, mismos que fueron atendidos por la Demandante y que posteriormente CFE se pronunció sobre su cierre en forma expresa. Incluye el número, el oficio de cierre y su fecha.²⁸⁷

RGs “Rechazados”

393. Según la Demandante, CFE pretendió y aún pretende hacer pasar por RGs cuestiones que, por un lado, no constituyen Defectos o que, por otro, se encuentran relacionadas con uso o desgaste normal de la Central o con la falta de operación y mantenimiento adecuado de la Central. Sostiene que la Demandada nunca pudo comprobar cómo los supuestos RGs presentados derivaban de manera alguna de un vicio oculto o del incumplimiento de alguna obligación por parte de la Demandante, y cita, a manera de ejemplo, RGs presentados por CFE que se refieren

²⁸⁴ Dictamen GPS II, Apéndice GPS-02 y Anexo A-089.

²⁸⁵ Ver Transcripción 17-02-2022 (4ª Parte), págs. 22 y 23. Además, ver Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001, en los que analiza ¶¶ 265 a 753 las DMs números 331, 375, 436, 437, 444, 489, 490, 515, 517, 542, 556, 558, 561, 562, y RGs números 17, 20, 21, 22, 24, 32, 36 y 73.

²⁸⁶ Memorial de Demanda, ¶ 664.

²⁸⁷ Los RGs son los números 11, 12, 13, 15, 16, 26, 30, 31, 33, 35, 38, 39, 44, 46, 47, 48, 49, 51, 53, 54, 55, 57, 59, 61, 67, 78, 79, 86, 87, 106, 107, 109, 110, 114, 117, 124, y 175.

a solicitudes de polipastos adicionales a los previstos por el Contrato, así como plataformas adicionales a las confirmadas o acordadas en la etapa de ingeniería.²⁸⁸

394. La Demandante incluye una relación de 31 RGs que tuvieron un “cierre automático” puesto que CFE no presentó observaciones dentro de los 14 Días siguientes a que la Demandante los clasificara como tales.²⁸⁹

RGs presentados Fuera del Periodo de Garantía

395. La Demandante también rechaza un número relevante de RGs en la medida en que sostiene que fueron presentados fuera del Periodo de Garantía, ya que, desde su punto de vista, tanto el Periodo de Garantía como la Garantía Operativa vencieron el 9 de junio de 2019, y la Clausula 20.1 establece que: “*el Contratista quedará obligado, a lo largo del Período de Garantía aplicable, a responder de los Defectos que resultaren de las mismas*”, lo que implica que la Demandante no estaba obligada a responder por aquellos RGs que fueron presentados después del vencimiento del Periodo de Garantía.²⁹⁰
396. Dentro de este tercer grupo, Empalme lista a 79 RGs que señala fueron presentados en fecha posterior al vencimiento de la Garantía Operativa, es decir, fueron presentados después del 9 de junio de 2019, fecha en que argumenta venció dicha Garantía Operativa. De ese total, lista a 13 que fueron presentados el 22 de junio de 2019;²⁹¹ 17 el 27 de junio de 2019;²⁹² 22 el 29 de junio de 2019;²⁹³ en tanto que los 26 restantes, el 22 de julio de 2019.²⁹⁴
397. Pero independientemente del alegado vencimiento de la Garantía Operativa, la Demandante añade que la gran mayoría de los RGs presentados por CFE después del 9 de junio de 2019 serían igualmente improcedentes, ya que ni siquiera cuentan con las características necesarias para considerarse como un RG bajo el Contrato, pues se trata de cuestiones que no constituyen “Defectos” según quedó dicho término definido bajo la Cláusula 1.1 del Contrato.²⁹⁵ Es decir, que no derivan de Defectos que resulten de vicios ocultos o de responsabilidades de Empalme en términos del Contrato. Empalme no aclara, sin embargo, cuáles de ellos entran dentro del rechazo por no constituir “Defectos” y cuáles no.

²⁸⁸ Memorial Pre-Audiencia Empalme, ¶ 124.

²⁸⁹ Memorial de Demanda, ¶ 668. Los RGs en este grupo son 23, 25, 27, 28, 36, 37, 41, 42, 56, 60, 62, 63, 64, 65, 71, 74, 77, 80, 84, 85, 90, 92, 105, 1118, 120, 121, 129, 130, 131, 168 y 177.

²⁹⁰ Memorial Pre-Audiencia Empalme, ¶ 127.

²⁹¹ Los RGs números 178 a 190.

²⁹² Los RGs números 191 a 208.

²⁹³ Los RGs números 209 a 230.

²⁹⁴ Los RGs números 231 a 256.

²⁹⁵ Memorial Pre-Audiencia Empalme, ¶ 129.

RGs “Rechazados por Diversas Razones”.

398. En una cuarta categoría, Empalme incluye a los RGs “rechazados por diversas razones”. Entre ellos se encuentran RGs “repetidos” que fueron rechazados debido a que su descripción estaba incluida dentro de otros RGs o incluso dentro de algunas DMs.²⁹⁶ En ellos lista a los siguientes:

Reclamos de Garantía rechazados “Por Diversas Razones”		
No.	Motivo rechazo Empalme	Dictamen GPS
14	La atención de la situación descrita se llevaría a cabo mediante la resolución de la DM 382	La naturaleza y el fondo de este RG corresponde técnicamente con la DM 392
40	No consistía en un RG conforme a lo dispuesto por el Contrato, y se estimó que la problemática era consecuencia de falta de mantenimiento	Problemática consecuencia de falta de mantenimiento y/o actividades que forman parte de la normal operación por parte de CFE
43	Se trata de trabajos de mantenimiento correctivo por desgaste en partes finitas de los equipos	Los trabajos correspondientes eran de mantenimiento correctivo
45	La atención de la situación descrita se llevaría a cabo mediante la resolución de la DM 546	Se atendía a través de la DM 546
50	La señalización de edificios se atendería conforme a lo recogido en el listado de DMs	Los señalamientos y rótulos identificados como faltantes quedaron documentados en la lista de DMs por medio de las DMs 285, 316, 317 y 318
52	Las pruebas solicitadas ya habían sido realizadas y los registros correspondientes se encontraban en el Manual de Pruebas y Puesta en Servicio en los apartados de CICLO, GVRC1 y GVRC2 entregado oficialmente a CFE	Las pruebas solicitadas ya habían sido realizadas y los registros de las mismas, y el Manual de Pruebas y Puesta en Servicio, ya había sido entregado a CFE
58	No existía ninguna problemática con el Sistema de Análisis y Muestreo Químico, sino que CFE debía realizar una limpieza y mantenimiento rutinario para poder mantener el sistema operativo	La situación de ensuciamiento descrita por la CFE solo demostraba la falta de mantenimiento rutinario de los sistemas
66	Las plataformas instaladas permitían la manipulación manual de las válvulas durante la operación normal de la Planta	Es posible la manipulación manual de las válvulas durante la operación de la Planta por medio de las plataformas instaladas

²⁹⁶ Memorial Pre-Audiencia, ¶ 125

Reclamos de Garantía rechazados “Por Diversas Razones”		
No.	Motivo rechazo Empalme	Dictamen GPS
68	Se rechaza pues se abordaban dos contextos diferentes	Se exhortó a CFE a generar un RG para cada concepto, sin que CFE manifestara nada con posterioridad
69	Se abordaban dos contextos diferentes, además de que se requería en GVRC1 para atender equipo de GVRC2	Se exhortó a CFE a generar un RG para cada concepto, sin que CFE manifestara nada con posterioridad
70	La atención de la situación descrita se llevaría a cabo mediante la resolución de la DM 534	Se atendía a través de la DM 534
72	Se abordaban dos contextos diferentes que no guardaban relación directa y solicitó generar un RG con cada uno	Se exhortó a CFE a generar un RG para cada concepto.
75	Se abordaban dos contextos diferentes que no guardaban relación directa y solicitó generar un RG con cada uno	Se exhortó a CFE a generar un RG para cada concepto
76	El problema fue ocasionado por mala manipulación del personal de CFE Generación, lo cual se reportó y se indicó al persona de CFE la manera correcta de manipular los rotámetros.	Se trató de un problema ocasionado por la mala manipulación de los rotámetros
81	Se abordaban dos contextos diferentes que no guardaban relación directa y solicitó generar un RG con cada uno	Se exhortó a CFE a generar un RG para cada concepto
83	El reconocimiento y consecuente supresión/restablecimiento de alarmas del alarmero forman parte de la normal operación de la Central y, el no actualizar periódicamente la atención a las mismas, constituye una operación deficiente	Forma parte de la operación normal de la Central, lo que evidencia una operación deficiente por parte de CFE.
88	No consistía en un reclamo de garantía conforme a la definición del Contrato	Los accesos no son reclamos de garantía ni vicios ocultos
89	Repetido con el RG 45, y la atención se llevaría a cabo mediante la resolución de la DM 546	La atención se realizaría por medio de la resolución de la DM 546
91	Se abordaban dos contextos diferentes que no guardaban relación directa y solicitó generar un RG con cada uno	Se exhortó a CFE a generar un RG para cada concepto

Reclamos de Garantía rechazados “Por Diversas Razones”		
No.	Motivo rechazo Empalme	Dictamen GPS
93	El tema de polipastos no era un reclamo de garantía o vicio oculto, precisando que el tema de plataformas y rieles quedaba cerrado en DMs	Las DMs relacionadas con plataformas y polipastos quedaron claramente documentadas en el listado de DMs
94	Se trata de cuatro válvulas diferentes y solicitó generar un RG con cada uno	Se exhortó a CFE a generar un RG para cada concepto
95	Se trata de cuatro válvulas diferentes y solicitó generar un RG con cada uno	Repetido con el RG 94, y CFE no presentó oposición con posterioridad
96	Se trata de cuatro válvulas diferentes y solicitó generar un RG con cada uno	Repetido con el RG 94 y 95, y CFE no presentó oposición con posterioridad
97	Se trata de cuatro válvulas diferentes y solicitó generar un RG con cada uno	Repetido con el RG 94, 95 y 96, y CFE no presentó oposición con posterioridad
98	No podía ser considerado ni DM ni RG	No constituye una DM o RG y CFE no presentó oposición con posterioridad
99	Repetido con el RG 93	Repetido con el RG 93, y CFE no presentó oposición con posterioridad
100	La atención de la situación descrita se llevaría a cabo mediante la resolución de la DM 290	No puede ser considerados RGs por no tratarse de un Defecto
101	El RG no tenía sustento técnico pues la norma IEEE 519 “ <i>Recommended practice and requirements for harmonic control in electric power system</i> ”, el sistema se encontraba en los valores permisibles para el nivel de distorsión armónica total.	No cuenta con sustento técnico, al estar el sistema entre los valores permisibles para el nivel de distorsión armónica total de onda de voltaje
102	El RG no tenía sustento técnico pues la norma IEEE 519 “ <i>Recommended practice and requirements for harmonic control in electric power system</i> ”, el sistema se encontraba en los valores permisibles para el nivel de distorsión armónica total.	No cuenta con sustento técnico, al estar el sistema entre los valores permisibles para el nivel de distorsión armónica total de onda de voltaje
103	Se abordaban dos contextos diferentes que no guardaban relación directa y solicitó generar un RG con cada uno	Se exhortó a CFE a generar un RG para cada concepto y CFE no presentó oposición con posterioridad
104	Se abordaban dos contextos diferentes que no guardaban relación directa y solicitó generar un RG con cada uno	Se exhortó a CFE a generar un RG para cada concepto y CFE no presentó oposición con posterioridad

Reclamos de Garantía rechazados “Por Diversas Razones”		
No.	Motivo rechazo Empalme	Dictamen GPS
108	No es responsable, ya que la Garantía no cubría Defectos o Desperfectos en la Central, las Obras o los Materiales que fueran causados por el uso y desgaste normal, por la operación o mantenimiento inapropiado o inadecuado de la Central, por negligencia o alteraciones no autorizadas a las Obras o a los Materiales	No aplicable por formar parte de la operación normal de la Central, lo que evidencia una operación deficiente por parte de CFE.
111	Se realizó una prueba funcional del sistema de manera exitosa, demostrándose por un periodo continuo de 48 horas que la producción indicada por Contrato para la máquina era la adecuada.	La producción de la evaporadora cumple con lo especificado e incluso la evidencia correspondiente se encuentra firmada por CFE
112	Las acciones correctivas de la alarma que enviaban como evidencia eran parte de la operación del equipo que correspondía a CFE	La acción requerida corresponde al operador
116	No cumplía con la definición de vicio oculto ni se trataba de un “Defecto”, adicionalmente el concepto no fue incorporado por las Partes como una DM en la lista correspondiente del Acta de Aceptación Provisional	No cumple con las características de un vicio oculto ni tampoco es un “Defecto”
119	La atención de la situación descrita ya estaba considerada en la DM 352	Se encuentra considerada en la DM 352
122	Reflejado en la DM 215, por lo que ya se habían completado los trabajos de reparación e igualación de color en el piso falso de la sala de control	Considerado como la DM 215 y CFE no presentó oposición con posterioridad
123	La limpieza se había realizado en el mes de junio de 2018 y que, a partir de la atención, se volvía un trabajo de mantenimiento	Constituía un trabajo de mantenimiento responsabilidad de CFE y CFE no presentó oposición con posterioridad
125	El registrador de disturbios ya se encontraba instalado en el gabinete 12BAY30, ubicado en la sala de protecciones eléctricas	El registrador de disturbios existe, está instalado y forma parte de la ingeniería del Proyecto
126	El registrador de disturbios ya se encontraba instalado en el gabinete 12BAY30, ubicado en la sala de protecciones eléctricas	El registrador de disturbios existe, está instalado y forma parte de la ingeniería del Proyecto
127	El control de aire acondicionado para el paquete donde se encuentra el sistema de excitación de la TG2 operaba de acuerdo con	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE

Reclamos de Garantía rechazados “Por Diversas Razones”		
No.	Motivo rechazo Empalme	Dictamen GPS
	la filosofía descrita en la placa del controlador de dichos aires	
128	El control de aire acondicionado para el paquete donde se encuentra el sistema de excitación de la TG1 operaba de acuerdo con la filosofía descrita en la placa del controlador de dichos aires	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
132	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
133	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
134	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
135	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
136	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
137	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
138	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
139	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
140	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
141	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
142	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
143	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
144	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE

Reclamos de Garantía rechazados “Por Diversas Razones”		
No.	Motivo rechazo Empalme	Dictamen GPS
145	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
146	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
147	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
148	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
149	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
150	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
151	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
152	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
153	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
154	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
155	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
156	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
157	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
158	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
159	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
160	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE

Reclamos de Garantía rechazados “Por Diversas Razones”		
No.	Motivo rechazo Empalme	Dictamen GPS
161	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
162	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
163	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
164	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
165	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
166	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
167	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
169	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
170	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
171	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
172	No cumplía con la definición de vicio oculto dado que no consistía en un “Defecto”.	No se trata de un “Defecto”, vicio oculto o mal funcionamiento; sin oposición posterior por CFE
173	Cuando se cambian los filtros se debe realizar limpieza a detalle de la casa para evitar dejar residuos que pudieran causar algún daño y, una vez finalizada la limpieza, con el aval de personal de Siemens, se podía proceder al cierre definitivo de las puertas de casa de filtros	Los filtros utilizados eran filtros usados o viejos y, por lo tanto, era normal que tras ser desmontados presentaran daños físicos
174	La atención de la situación descrita ya estaba considerada en la DM 352	Ya se encuentra considerada en la DM 352
176	La atención de esta situación se llevaría a cabo mediante la resolución de la DM 114	Ya se encuentra considerada en la DM 114.

RGs “En Controversia”

399. Por otra parte, la Demandante describe otra categoría de RGs –aquéllos “en controversia”– es decir, aquéllos que fueron aceptados por la Demandante para su atención, y sobre los cuales las Partes tienen opiniones divergentes en cuanto a su correcta o incorrecta atención por parte de Empalme. Se encuentran los siguientes:

Reclamos de Garantía “En Controversia”		
No.	Motivo rechazo Empalme	Dictamen GPS
10	Se implementaron las recomendaciones mencionadas por Doosan Skoda Power y envió solicitud de cierre incorporando una carta del mismo en la que se detallaba la causa raíz del evento, los factores causales, las acciones correctivas implementadas y acciones para prevenir que el evento sucediera nuevamente	CFE pidió un análisis adicional de causa-raíz no incluido en la solución acordada en un principio y que, adicionalmente, fue mencionada por Doosan Skoda en la carta que se transmitió a CFE. Consecuentemente, en la opinión de GPS dicho RG debe de considerarse cerrado.
17	La causa raíz del bajo nivel en el cárcamo de la obra de toma de agua sumergida, se identificó como la reducción del área transversal de la tubería del inmisario por una obstrucción, afectando el flujo y generando alarmas de bajo nivel de cárcamo. La obstrucción de la tubería se produjo por la proliferación de “Biofouling” en las paredes de la misma	La dosificación especificada por CFE de hipoclorito de sodio no era la correcta, por lo que no se pudo evitar la formación y desarrollo de microorganismos en las paredes de la tubería. En opinión de GPS dicho RG debe de considerarse cerrado.
20	Se determinó que sería atendería durante el paro de planta programado el 27 de mayo de 2019. Con aprobación de ingeniería de Empalme, éste bajó el valor de Set point en grado de sobrecalentamiento, siendo que en los últimos arranques se alcanzó el grado de sobrecalentamiento sin mayor objeción	CFE no tuvo en cuenta que, en el Formulario de Cierre, se manifestó que la modificación al <i>Set point</i> fue avalado por Ingeniería de Empalme. En opinión de GPS, dicho RG debe de considerarse cerrado.
29	De acuerdo con el Informe del Análisis de Vibraciones de la Evaporadora de Agua de Mar, se tenía un desgaste en los rodamientos del equipo, situación que se presentó después de meses de operación y constituía mantenimiento preventivo. A pesar de que desde un inicio el RG fue rechazado, Empalme aceptó cambiar los	La fuga no fue observada en la inspección de Empalme y, consecuentemente, en la opinión de GPS dicho RG debe de considerarse cerrado.

Reclamos de Garantía “En Controversia”		
No.	Motivo rechazo Empalme	Dictamen GPS
	rodamientos y dar mantenimiento a la unidad y monitoreo de comportamiento de vibraciones. CFE, observó no obstante fuga de aceite presente en el equipo.	
32	Se informó que la RG había sido atendida adjuntando gráficas de tendencia y solicitando su cierre. Sin embargo, CFE rechazó el cierre indicando que la evidencia presentada correspondía a la etapa de rodado mientras que el problema se presentaba posterior a sincronización.	Se evidencia con registros que el comportamiento del caudal de vapor en ambos trenes es equilibrado respecto a la generación posterior a la sincronización. Consecuentemente, en la opinión de GPS dicho RG debe de considerarse cerrado.
34	Se realizó el cambio en la programación para corregir el error detectado en el HMI del sistema de dosificación de GVRC1, así como el cambio para que en la pantalla principal de Inicio del sistema de DQ de GVRC1 llegara la retroalimentación correcta del estado de cada uno de los productos químicos dosificados (modo local, modo auto, modo remoto). Además, se verificaron los cambios correspondientes en conjunto con el personal de CFE Generación y CPT. No obstante, CFE mantiene que se sigue presentando la falla, a pesar de que Empalme verificó nuevamente sin encontrar la misma,	La solución fue verificada en conjunto con CFE Generación y CPT, quienes manifestaron su conformidad con los trabajos realizados. Consecuentemente, en la opinión de GPS dicho RG debe de considerarse cerrado.
73	Se vio que los <i>settings</i> cargados en el TCS no eran los mismos con los que se validaron las pruebas del ASR. Se rescataron los <i>settings</i> validados por LAPEM durante las pruebas del AVR/ASR y se volvieron a cargar el TCS T3000. CFE rechazó el cierre del RG adjuntando como evidencia gráficas emitidas por el CENACE con información que no era referente a los sistemas de la Central	Se atendió el RG, e hicieron los ajustes correspondientes. CFE no acepta no obstante que el proveedor encontró alteraciones en los sets de ajuste del equipo respecto a los ajustes con los cuales el equipo fue probado y validado de manera formal inicialmente. Consecuentemente, en la opinión de GPS dicho RG debe de considerarse cerrado.
113	Se cambió el carrete con poro y realizó limpieza de toda la tubería. CFE rechaza	Se dio atención al RG con el cambio de un tramo (carrete) y limpiando toda la tubería. No se

Reclamos de Garantía “En Controversia”		
No.	Motivo rechazo Empalme	Dictamen GPS
	el cierre de este RG dado que menciona que se requiere cambio de tubería, ya que la causa raíz del RG se presentó en dos ocasiones.	presentó evidencia de fugas posteriores. Consecuentemente, en la opinión de GPS dicho RG debe de considerarse cerrado.
115	Se atendió la fuga en el canal de descarga colocando un sello elástico por la parte inferior del canal, éste fue probado con todas las bombas de circulación operando sin presentarse la fuga. CFE rechazó el cierre del RG debido a que supuestamente persistían las filtraciones en la junta fría.	Se atendió el RG colocando un sello elástico en el canal por la parte inferior del mismo. Si bien CFE remitió otros oficios sosteniendo que persistían las filtraciones, los mismos fueron remitidos con posterioridad a la fecha de vencimiento de la Garantía Operativa. Consecuentemente, en la opinión de GPS dicho RG debe de considerarse cerrado.

RGs con Reincidencias

400. Respecto a “Reincidencias” de RGs que, a pesar de haber sido cerrados –ya sea de manera automática o mediante acuerdo entre las Partes– la Demandante sostiene que CFE pretende que estos RGs deben permanecer “Abiertos” con base en la Cláusula 20.4,²⁹⁷ lo que la Demandante rechaza, pues señala que, si bien se encuentra obligada a atender aquellos eventos de reincidencia que se presenten durante el año siguiente a la realización de los trabajos de reparación de cada RG, ello aplica exclusivamente respecto de los RGs que fueron atendidos por Empalme y no así en aquellos que fueron rechazados o fueron atendidos por la propia CFE.²⁹⁸
401. En todo caso, la Demandante agrega que, aún y cuando hubiera procedido la atención de algunos de los casos de reincidencia indicados por CFE conforme a la Cláusula 20.4, lo cierto es que, “... en todos los casos procedentes, CFE no notificó del evento de reincidencia correspondiente, sino hasta después de la ejecución de la Carta de Crédito HSBC. Esto quiere decir que, CFE unilateralmente decidió reabrir RGs que ya se encontraban cerradas (incluso por acuerdo de las Partes) y cobrar montos arbitrarios por la supuesta atención de los mismos. Lo anterior, sin dar oportunidad a Empalme de verificar si efectivamente existieron eventos de reincidencia y, en todo caso, de atender los mismos.” Adicionalmente, sostiene la Demandante que la Demandada no ha aportado los elementos probatorios en este arbitraje para acreditar que dichos RGs presentaron eventos de reincidencia. Consecuentemente, no es

²⁹⁷ Esta cláusula establece que “el buen funcionamiento del Equipo Principal o de los Materiales que deban ser reparados o reemplazados durante el Período de Garantía, así como su carencia de Defectos o Desperfectos, quedará garantizado por el Contratista por el término de 1 (un) año a partir de la reparación o reemplazo de que se trate al quedar libre de Defecto y/o Desperfectos”.

²⁹⁸ Memorial Pre-Audiencia Empalme, ¶¶ 138-139.

procedente el reabrir los RGs bajo este criterio y, mucho menos, imputarle a Empalme el costo de los supuestos trabajos de atención de los mismos.

402. En el Memorial de Cierre Empalme, la Demandante insiste que, al notificar los supuestos eventos de reincidencia *después* de la ejecución de la Carta de Crédito HSBC, CFE privó a Empalme de la oportunidad de verificar la actualización y procedencia de eventos de reincidencia y, en su caso, de atenderlos.²⁹⁹

RGs Abiertos

403. Finalmente, la Demandante señala una relación de aquellos RGs respecto a los cuales acepta que son su responsabilidad y reconoce que deben aún considerarse como “Abiertos”. Sin embargo, indica que la falta de atención de estos RGs es por razones no imputables a Empalme, a saber: (i) falta de concesión de licencias; (ii) requerimiento de planta parada; y (iii) falta de contestación a cotizaciones enviadas, cuestiones que son obligaciones a cargo de CFE conforme a los Criterios para la Resolución de los RGs.³⁰⁰

Reclamos de Garantía “Abiertos”		
No.	Motivo rechazo Empalme	Dictamen GPS
18	Tras comentarios y revisiones por parte de CFE, se emitió la Revisión 6 del Procedimiento, con la finalidad de poder verificarlo durante la ejecución de las Pruebas de Garantía (Quinto Convenio Modificatorio). Sin embargo, la prueba no se pudo realizar por causas ajenas a Empalme	Se solicitó a CFE compartir los consumos de hidrógeno correspondientes a cada una de las Unidades Turbogeneradoras. CFE se limitó a emitir una respuesta genérica, sin el nivel de detalle mínimo necesario. Consecuentemente, en la opinión de GPS dicho RG debe de considerarse “cerrado”
19	Durante la parada de planta, como parte de las tareas de mantenimiento, se realizó la limpieza a los intercambiadores de calor. Para corroborar el tema de las temperaturas, se acordó entre el proveedor del equipo, Siemens, y Empalme, verificar la lógica del enfriador en cada uno de los <i>skids</i> para comprobar que los mismos funcionaban correctamente. Esta prueba requería solicitar una licencia de trabajo a CFE con la turbina en línea. Sin embargo, esta licencia no fue concedida, imposibilitando la atención de este RG.	En opinión de GPS dicho RG debe de considerarse “abierto”

²⁹⁹ Memorial de Cierre Empalme, ¶ 29

³⁰⁰ Memorial Pre-Audiencia Empalme, ¶ 141.

21	Empalme solicitó licencia para la atención de este RG en una parada de planta prevista por CFE entre el 7 y 9 de marzo de 2020. Sin embargo, no llegó a acordarse fecha para su atención.	En opinión de GPS dicho RG debe de considerarse “abierto”
22	Se aceptó la RG Sin embargo, la solución implicaba una parada de planta con compra de ciertos elementos que no fueron adquiridos	En opinión de GPS dicho RG debe de considerarse “abierto”
24	Empalme lo identificó inicialmente como procedente. Sin embargo, durante la evaluación de fondo, se encontró que esta situación se presentaba durante arranques en los que se purgaba excesivamente para buscar condiciones en la calidad de vapor en el menor tiempo posible. Esto implica que, en condiciones normales, siguiendo las curvas de arranque sin intentar purgar excesivamente, la situación no debería de presentarse.	Toda vez que Empalme no solicitó el cierre, pese a que el RG, al tratarse de una operación anormal, se encuentra fuera de su alcance, En opinión de GPS dicho RG debe de considerarse “abierto”
82	Empalme lo identificó inicialmente como procedente y anunció que se atendería durante una para de planta. No obstante, posterior a su aceptación, Empalme consideró que el evento es parte de la operación normal de la Central y que no debió ser aceptado.	En opinión de GPS dicho RG debe de considerarse “abierto” dado que el RG fue aceptado.

404. Añade Empalme que dichos RGs “Abiertos” están valorizados en la sección 10.1.2 del Dictamen GPS II.³⁰¹

Reclamo de Garantía RG-017

405. La Demandante hace un análisis especial respecto del caso RG-017, con toda certeza derivado del monto que representa.³⁰² Este RG se refiere a la acumulación de Biofouling marino (esto es, la adhesión de organismos marítimos a ciertas superficies) en la toma de agua sumergida, lo que, a su vez, ocasionó que la tubería del inmisario colapsara y afectara el flujo en la toma de agua sumergida.

³⁰¹ El monto asciende a USD \$28,509.18.

³⁰² El reclamo asciende a \$19,977,969.18 M.N. y USD \$4,088,772.61, según se detalla en el Dictamen Pericial Ing. Cámara Anzures, ¶ 259.

406. La Demandada ha sostenido que es responsabilidad de la Demandante cambiar la dosificación de cloro en el tratamiento de las tuberías. Sin embargo, la Demandante sostiene,³⁰³ por el contrario, que según el Informe Pericial H20,³⁰⁴ la causa raíz del *biofouling* se encuentra en las Especificaciones del Proyecto³⁰⁵ suministradas por la CFE y que no fueron eficientes para prevenirlo, amén de que las medidas precisadas por la Demandada, como rayos ultravioleta u ozono, no son adecuadas y eficaces en agua de mar.³⁰⁶
407. La Demandante argumenta que su límite de responsabilidad era el acatamiento de las especificaciones proporcionadas por CFE, y agrega que, si bien en el Dictamen Pericial Ing. Cámara Anzures, de CFE,³⁰⁷ se citan las Cláusulas 4.2 y 4.3 del Contrato para sostener una obligación de Empalme, en realidad lo que sucede es que se hace una interpretación errónea de dichas Cláusulas, puesto que se limitan a las “especificaciones” del Contrato, mismas que la Demandante ejecutó y siguió, sin que el error de CFE en cuanto a las medidas empleadas para prevenir el *biofouling* sea atribuible a Empalme.
408. En su Memorial de Cierre, la Demandante insiste en que el objeto del reclamo fue resultado de las incorrectas especificaciones de CFE correspondientes a la dosificación de hipoclorito de sodio (que, en todo caso, Empalme implementó correctamente), cuyas especificaciones fueron ineficientes para evitar la aparición de *biofouling*.³⁰⁸
409. En este sentido, la Demandante sostiene que la obligatoriedad de aplicar las especificaciones que CFE le proporcionó se desprende del Contrato, así como de las propias especificaciones, las cuales se establecen de forma definitiva, sin requerir a la Demandante la realización de estudios adicionales que podrían modificar las especificaciones técnicas.³⁰⁹
410. La Demandante distingue a estas especificaciones de aquéllas “especificaciones técnicas” relacionadas con los parámetros del suelo y topografía, las cuales explícitamente establecen que contienen un informe de carácter general que serviría como referencia técnica que habría de ser complementada, detallada y confirmada de acuerdo con los estudios que la Contratista (esto es, Empalme) realizase. Sobre el particular, agrega que no debe considerarse de manera

³⁰³ Memorial de Demanda, ¶¶ 937–940.

³⁰⁴ Dictamen GPS I, Anexo P088.

³⁰⁵ Especificaciones del Proyecto y Normas (Anexo 2 del Contrato), (A-105)

³⁰⁶ Memorial Pre-Audiencia Empalme, ¶ 133.

³⁰⁷ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001

³⁰⁸ Memorial de Cierre Empalme, ¶ 26

³⁰⁹ Memorial de Cierre Empalme, ¶ 27. Ver Anexo A-105 Especificaciones del Proyecto y Normas (Anexo 2 del Contrato): “El agua de mar que se utilizará para agua de enfriamiento y para tratamiento de agua de repuesto al ciclo, deberá tratarse mediante un Hipoclorador, [...] debe de ser capaz de producir en 3 hrs la solución requerida para proporcionar choques de 3 ppm de cloro con una duración de 20 minutos por punto de dosificación, para el flujo total de agua de circulación. Por turno (8 hrs de duración) se debe cubrir la dosificación a ambos puntos [...]. Este equipo deberá ser alimentado mediante las bombas de alimentación de agua de mar.”

alguna que correspondía a la Demandante llevar a cabo estudios adicionales sin la indicación directa de CFE.

411. También hace referencia a las manifestaciones del Biólogo Harry Polman –parte del equipo de GPS– quien manifestó durante su comparecencia en la Audiencia que realizar ajustes a las especificaciones técnicas tomaría tiempo que un contratista no tendría disponible durante la primera etapa de un proyecto como aquel objeto del Contrato.³¹⁰

Posición de CFE

412. La Demandada argumenta que, de conformidad con la Cláusula 20.1 (Garantía Operativa), la Demandante quedó contractualmente obligada, a lo largo del Período de Garantía aplicable, a responder de los Defectos que resultaren de las mismas, de vicios ocultos, y *“de cualquier otra responsabilidad en que hubiere incurrido en los términos señalados en el Contrato”*.³¹¹
413. La Demandada realizó en su Contestación a la Demanda un ejercicio pormenorizado de cada uno de los RGs que presentó durante la vigencia y durante el Periodo de Garantía. Así, en los incisos 944 a 1022 de su Contestación a la Demanda confirma aquellos RGs que se encuentran “cerrados”, y en los incisos 1023 al 1364 analizó aquéllos que la Demandante manifiesta tuvieron “cierre automático”, con excepción de 6 RGs (los números 28, 71, 120, 129, 130 y 168).
414. Posteriormente, la Demandada examina en los incisos 1365 al 1432 aquellos RGs que fueron rechazados por la Demandante por ser presumiblemente “presentados después del vencimiento de la Garantía Operativa”; en los incisos 1433 al 2135, aquéllos que se encuentran “Rechazados por Diversas Razones”; y en los incisos 2136 al 2278, los referentes a RGs que se encuentran en “Controversia” entre las Partes. Finalmente, en los incisos 2279 al 2324 analiza los RGs que según la Demandante se encuentran “Abiertos”.
415. En este sentido, CFE manifestó que, al 9 de junio de 2021, se encontraban pendientes de atención 74 RGs.³¹²
416. En su Contestación a la Demanda, CFE señala que incluye una tabla que *“... enlistan cada una de los Reclamos de Garantía que la Demandante no ha atendido”*.³¹³ Lamentablemente, no incluyó la tabla descrita. Aunque resulta difícil examinarlas en un formato consolidado, en

³¹⁰ Memorial de Cierre Empalme, ¶ 27.

³¹¹ Contestación a la Demanda, ¶ 941

³¹² Contestación a la Demanda, ¶ 939

³¹³ Contestación a la Demanda, ¶ 943.

dicho Memorial de Contestación el Tribunal ha procurado extraer y analizar los reclamos descritos.

RGs presentados después del 9 de junio de 2019

417. A continuación, se incluye una relación de los 66 RGs presentados después del 9 de junio de 2019, fecha en la cual la Demandante argumenta venció la Garantía Operativa, y se hace referencia en la tabla si, a criterio de la CFE, se encuentran aún “Abiertos” o “Cerrados”. Aquéllos que se señalan como “Cerrados” han sido resueltos (con un par de excepciones) con recursos de la propia CFE o mediante recursos derivados de la ejecución de la Carta de Crédito HSBC. Por fácil identificación, están *sombreados* aquéllos que CFE estima se encuentran “Abiertos”.

Reclamos de Garantía de CFE – Presentados después del 9 de junio de 2019		
No.	Condición de trabajos	Estado que Guarda
187	Pendiente de atención por Empalme	Abierto
191	Atendido con recursos de la Carta de Crédito	Abierto
192	Atendido con recursos de la Carta de Crédito	Abierto
193	Atendido con recursos de la Carta de Crédito	Cerrado
194	Pendiente de atención por Empalme	Abierto
195	Pendiente de atención por Empalme	Abierto
196	Atendido con recursos de la Carta de Crédito	Cerrado
197	Atendido con recursos de la Carta de Crédito	Cerrado
198	Atendido con recursos de la Carta de Crédito	Cerrado
199	Atendido con recursos de la Carta de Crédito	Cerrado
200	Atendido con recursos de la Carta de Crédito	Cerrado
203	Se procedió a atenderse con recursos propios de la CFE	Cerrado
206	Se procedió a atenderse con recursos propios de la CFE	Cerrado
201	Atención de la Deficiencia Menor DM-44	Cerrado
202	Atención de la Deficiencia Menor DM-44	Cerrado

Reclamos de Garantía de CFE – Presentados después del 9 de junio de 2019		
No.	Condición de trabajos	Estado que Guarda
208	Atendido con recursos de la Carta de Crédito	Cerrado
204	Pendiente de atención por Empalme	Abierto
205	Pendiente de atención por Empalme	Abierto
207	Pendiente de atención por Empalme	Abierto
214	Se procedió a atenderse con recursos propios de la CFE	Cerrado
216	Se procedió a atenderse con recursos propios de la CFE	Cerrado
218	Se procedió a atenderse con recursos propios de la CFE	Cerrado
220	Se procedió a atenderse con recursos propios de la CFE	Cerrado
209	Pendiente de atención por Empalme	Abierto
210	Pendiente de atención por Empalme	Abierto
217	Pendiente de atención por Empalme	Abierto
211	Pendiente de atención por Empalme	Abierto
212	Pendiente de atención por Empalme	Abierto
213	Pendiente de atención por Empalme	Abierto
215	Pendiente de atención por Empalme	Abierto
219	Pendiente de atención por Empalme	Abierto
221	Atendido con recursos de la Carta de Crédito	Cerrado
222	Atendido con recursos de la Carta de Crédito	Cerrado
223	Se procedió a atenderse con recursos propios de la CFE	Cerrado
224	Atendido con recursos de la Carta de Crédito	Cerrado
225	Atendido con recursos de la Carta de Crédito	Cerrado
227	Atendido con recursos de la Carta de Crédito	Cerrado
228	Se procedió a atenderse con recursos propios de la CFE	Cerrado

Reclamos de Garantía de CFE – Presentados después del 9 de junio de 2019		
No.	Condición de trabajos	Estado que Guarda
229	Atendido con recursos de la Carta de Crédito	Cerrado
230	Atendido con recursos de la Carta de Crédito	Cerrado
231	Atendido	Cerrado
232	Atendido	Cerrado
233	Pendiente de atención por Empalme	Abierto
234	Atendido	Cerrado
235	Atendido con recursos de la Carta de Crédito	Cerrado
236	Atendido con recursos de la Carta de Crédito	Cerrado
237	Pendiente de atención por Empalme	Abierto
238	Parcialmente atendido con recursos de la Carta de Crédito	Abierto
239	No sea adjudicado el Contrato para la atención	Abierto
240	Pendiente de atención por Empalme	Abierto
241	Pendiente de atención por Empalme	Abierto
242	Se procedió a atenderse con recursos propios de la CFE	Cerrado
243	Se procedió a atenderse con recursos propios de la CFE	Cerrado
244	Pendiente de adjudicar contrato para su atención	Abierto
245	Se procedió a atenderse con recursos propios de la CFE	Cerrado
246	Se procedió a atenderse con recursos propios de la CFE	Cerrado
247	Se procedió a atenderse con recursos propios de la CFE	Cerrado
248	Pendiente de atención por Empalme	Abierto
249	Pendiente de atención por Empalme	Abierto
250	Pendiente de atención por Empalme	Abierto
251	Pendiente de atención por Empalme	Abierto

Reclamos de Garantía de CFE – Presentados después del 9 de junio de 2019		
No.	Condición de trabajos	Estado que Guarda
252	Pendiente de atención por Empalme	Abierto
253	Pendiente de atención por Empalme	Abierto
254	No se ha adjudicado el Contrato para la atención	Abierto
255	No se ha adjudicado el Contrato para la atención	Abierto
256	Pendiente de atención por Empalme	Abierto

RGs “Rechazados por Diversas Razones”.

418. En cuanto a los RGs que fueron rechazados por la Demandante “Por Diversas Razones”, la Demandada confirma casos que han quedado “cerrados”, pero aclara que un número importante se encuentran aún “Abiertos” (*sombreados* en la tabla inferior):

Reclamos de Garantía de CFE - Rechazados “Por Diversas Razones”		
No.	Condición de trabajos	Estado que Guarda
14	Deficiencia Menor DM-392	Abierto
40	Satisfactorio	En proceso de cierre
43	RG atendido	Cerrado
45	Satisfactorio	Cerrado
50	Satisfactorio	Cerrado
52	Satisfactorio	Cerrado
58	Atendido con recursos de la Carta de Crédito	Cerrado
66	Pendiente de atención por Empalme	Abierto
68	Pendiente de atención por Empalme	Abierto
69	Pendiente de atención por Empalme	Abierto
70	Reclamo duplicado	Cerrado
72	Reclamo duplicado	Cerrado

Reclamos de Garantía de CFE - Rechazados “Por Diversas Razones”		
No.	Condición de trabajos	Estado que Guarda
75	Atendido	Cerrado
76	Atendido con recursos de la Carta de Crédito	Cerrado
81	Pendiente de atención por Empalme	Abierto
83	No se ha adjudicado el Contrato para su atención	Abierto
88	Pendiente de atención por Empalme	Abierto
89	Atendido con recursos de la Carta de Crédito	Cerrado
91	Reclamo duplicado	Cerrado
93	Reclamo duplicado	Cerrado
94	Pendiente de atención por Empalme	Abierto
95	Pendiente de atención por Empalme	Abierto
96	Reclamo duplicado	Cerrado
97	Reclamo duplicado	Cerrado
98	Pendiente de atención por Empalme	Abierto
99	Reclamo duplicado	Cerrado
100	Atendido	Cerrado
101	Reclamo duplicado	Cerrado
102	Reclamo duplicado	Cerrado
103	Atendido	Cerrado
104	Atendido	Cerrado
108	Reclamo duplicado	Cerrado
111	Pendiente de atención por Empalme	Abierto
112	Presentó alarma y disparo del equipo dejando fuera de servicio el equipo del Acondicionador de Aceite de la	Abierto

Reclamos de Garantía de CFE - Rechazados “Por Diversas Razones”		
No.	Condición de trabajos	Estado que Guarda
	Turbina de Vapor. Se atiende con Contrato con Doosan Skoda.	
116	Atendido	Cerrado
119	Duplicado DM-352, pendiente atención	Abierto
122	Reclamo duplicado	Cerrado
123	Reclamo duplicado	Cerrado
125	Pendiente de atención por Empalme	Abierto
126	Pendiente de atención por Empalme	Abierto
127	Atendido	Cerrado
128	Atendido	Cerrado
132	Pendiente de atención por Empalme	Abierto
133	Pendiente de atención por Empalme	Abierto
134	Pendiente de atención por Empalme	Abierto
135	Pendiente de atención por Empalme	Abierto
136	Pendiente de atención por Empalme	Abierto
137	Pendiente de atención por Empalme	Abierto
138	Pendiente de atención por Empalme	Abierto
139	Pendiente de atención por Empalme	Abierto
140	Pendiente de atención por Empalme	Abierto
141	Pendiente de atención por Empalme	Abierto
142	Pendiente de atención por Empalme	Abierto
143	Pendiente de atención por Empalme	Abierto
144	Pendiente de atención por Empalme	Abierto

Reclamos de Garantía de CFE - Rechazados “Por Diversas Razones”		
No.	Condición de trabajos	Estado que Guarda
145	Reclamo duplicado	Cerrado
146	Pendiente de atención por Empalme	Abierto
147	Pendiente de atención por Empalme	Abierto
148	Pendiente de atención por Empalme	Abierto
149	Pendiente de atención por Empalme	Abierto
150	Pendiente de atención por Empalme	Abierto
151	Pendiente de atención por Empalme	Abierto
152	Pendiente de atención por Empalme	Abierto
153	Pendiente de atención por Empalme	Abierto
154	Pendiente de atención por Empalme	Abierto
155	Pendiente de atención por Empalme	Abierto
156	Pendiente de atención por Empalme	Abierto
157	Pendiente de atención por Empalme	Abierto
158	Pendiente de atención por Empalme	Abierto
159	Pendiente de atención por Empalme	Abierto
160	Pendiente de atención por Empalme	Abierto
161	Pendiente de atención por Empalme	Abierto
162	Pendiente de atención por Empalme	Abierto
163	Reclamo duplicado	Cerrado
164	Se procedió a atenderse con recursos propios de la CFE	Cerrado
165	Se procedió a atenderse con recursos propios de la CFE	Cerrado
166	Se procedió a atenderse con recursos propios de la CFE	Cerrado
167	Se procedió a atenderse con recursos propios de la CFE	Cerrado

Reclamos de Garantía de CFE - Rechazados “Por Diversas Razones”		
No.	Condición de trabajos	Estado que Guarda
169	Atendido	Cerrado
170	Pendiente de atención por Empalme	Abierto
171	Pendiente de atención por Empalme	Abierto
172	Atención de la Deficiencia Menor DM-356	Cerrado
173	Atendido	Cerrado
174	Pendiente de concluir	Abierto
176	Atendido	Cerrado

RGs “En Controversia”.

419. Respecto a los RGs que ambas Partes estiman se encuentran “En Controversia”, la Demandada señala cuáles de ellos han quedado “Cerrados”, y aquéllos que se encuentran aún “Abiertos”, pero aclara que todos ellos fueron atendidos por la propia Demandada con recursos provenientes de la ejecución de la Carta de Crédito HSBC (salvo uno que correspondía a la DM-356):

Reclamos de Garantía de la CFE “En Controversia”		
No.	Condición de trabajos	Estado que Guarda
10	Incremento del torque del motor del tornaflecha al variar su velocidad (rpm) <i>Atendido con recursos de la Carta de Crédito</i>	Cerrado
17	Problemática de abatimiento del cárcamo de bombeo se debía a la proliferación de “biofouling” (acumulación biológica de microorganismos) debido al criterio de dosificación de hipoclorito especificado en el Contrato. <i>Atendido con recursos de la Carta de Crédito</i>	Abierto, en proceso de cierre
20	Simulación del permisivo de apertura del <i>bypass</i> de baja presión (grado de sobrecalentamiento), dado que los instrumentos (TE 11/12LBA60CT001JT01) están instalados en una ubicación incorrecta.	Cerrado

	<i>Atendido con recursos de la Carta de Crédito</i>	
29	Anomalías de la caja de engranes de la evaporadora, esto derivado de comportamiento fuera de rango de las vibraciones. <i>En proceso de atención con recursos de la Carta de Crédito</i>	Abierto
32	Rodado y sincronización de la Turbina de Vapor donde el sistema de control de repartición de caudal de los GVRC's <i>Atendido con recursos de la Carta de Crédito.</i>	Cerrado
34	Atención de la Deficiencia Menor DM-356	Cerrado
73	Sistema de Regulación de Frecuencia no realiza su función de manera adecuada. <i>En proceso de atención con recursos de la Carta de Crédito</i>	Abierto
113	Problemática de corrosión en tubería del Sistema de Limpieza de las Mallas Giratorias Tarnos. <i>En proceso de atención con recursos de la Carta de Crédito</i>	Abierto
115	Fuga en junta fría en muro del canal de descarga de agua de mar (agua de circulación). <i>Atendido con recursos de la Carta de Crédito.</i>	Cerrado

RGs “Abiertos”.

420. Finalmente, la Demandada examina aquellos RGs que la Demandante señala que se encuentran “Abiertos”, y manifiesta si lo están aún, o han sido “Cerrados” con recursos provenientes de la ejecución de la Carta de Crédito HSBC.

Reclamos de Garantía de la CFE - “Abiertos”		
No.	Motivo CFE	Dictamen CFE
18	Pérdida de pureza de hidrogeno en el Generador Eléctrico de TG1. <i>Atendido con recursos de la Carta de Crédito</i>	Cerrado
19	Arreglo en paralelo los dos intercambiadores de calor (PHX) y los dos ventiladores. <i>En proceso de atención con recursos de la Carta de Crédito.</i>	Abierto
21	Señales de los elementos de temperatura del bypass de media presión (grado de sobrecalentamiento).	Cerrado

Reclamos de Garantía de la CFE - “Abiertos”		
	<i>Atendido con recursos de la Carta de Crédito.</i>	
22	Simulación recurrente que durante las maniobras de acople del TREN 1 o TREN 2. <i>En proceso de atención con recursos de la Carta de Crédito.</i>	Abierto
24	Atención a la recurrente simulación de la temperatura del tanque de purga intermitente de los GVRC 1 y 2 para la apertura de la válvula de drenaje de purga intermitente. <i>Atendido con recursos de la Carta de Crédito.</i>	Cerrado
82	Atención a múltiples alarmas suprimidas y presente en el sistema T3000, correspondiente a las TG 1 y TG2	Abierto

Reclamo de Garantía RG-017

421. En cuanto al RG-017, la Demandada menciona que notificó este Reclamo de Garantía desde el 29 de abril de 2019, relacionado con el bajo nivel del cárcamo de bombeo para su análisis y su aceptación.³¹⁴
422. La Demandada señala que, en una reunión sostenida el 6 de junio de 2019, Empalme manifestó que la problemática de abatimiento del cárcamo de bombeo se debía a la proliferación de *biofouling* (acumulación biológica de microorganismos) debido al criterio de dosificación de hipoclorito especificado en el Contrato. CFE agrega que manifestó su completo desacuerdo al respecto, solicitando que Empalme acreditara que la problemática de *biofouling* no se produjo desde la etapa de montaje y hasta antes del inicio de operación del sistema de dosificación de hipoclorito, ya que durante este periodo no existió un agente biocida por parte de Empalme que evitara dicha proliferación.
423. Agrega que en la Clausula 4 del Contrato se incluyen obligaciones, tanto básicas como implícitas, y que en la Sección 7.3.7.4. (Criterio de análisis y diseño hidráulico del sistema de agua de circulación) así como en forma específica en la Sección 7.3.7.4.5 (Obras de toma y descarga submarina) se establece que el Contratista deberá “llevar a cabo los estudios definitivos que considere necesarios para la realización del proyecto constructivo ... que servirán como base para el diseño que deberá realizar, así como para la programación de las etapas constructivas” y agrega que también se prevé que “Para el cálculo de las pérdidas por fricción en la tubería se debe tomar en cuenta, de ser el caso, las incrustaciones orgánicas

³¹⁴ Contestación a la Demanda, ¶ 2147.

que pudieran desarrollarse en su interior”.³¹⁵ Como consecuencia, la Demandada argumenta que es responsabilidad del Contratista haber evitado y considerado el fenómeno de *biofouling* en las etapas de diseño, construcción y puesta en servicio, asegurando que la Central pudiese ser operada, administrada y mantenida en una forma eficiente, segura y ecológicamente óptima, conforme a las Especificaciones del Contrato.³¹⁶

424. La Demandada sostiene también que, desde febrero de 2017 a febrero del 2018, fecha en que se inició con la dosificación mediante el sistema hipoclorador, no se realizó dosificación ni se tomaron acciones preventivas para evitar la proliferación de *biofouling* en los inmisarios; ya que si bien la CFE considera verdadero que Empalme realizó una dosificación de biocida mediante un *skid* temporal desde el mes de junio de 2017 hasta el mes de enero de 2019, esta fue realizada únicamente en las secciones del canal de toma y cárcamo de bombeo, excluyendo la tubería de los inmisarios, siendo en esta última donde se considera el problema de crecimiento marino que obstruyó la sección hidráulica de la tubería que determina el abatimiento del nivel del agua en el cárcamo de bombeo.³¹⁷
425. Agrega que, a pesar de que el sistema de hipocloración y la dosificación especificada por la CFE son adecuados para controlar el *biofouling*, dicho sistema es coadyuvante para mitigar dicha problemática, por lo que es responsabilidad de Empalme haber evitado y considerado el fenómeno de *biofouling* en las etapas de diseño, construcción y puesta en servicio, asegurando que la Central pueda ser operada, administrada y mantenida en una forma eficiente, segura y ecológicamente óptima, conforme al Contrato.³¹⁸
426. La Demandada también hace referencia a que Empalme dejó pendiente la Protección Catódica de la tubería marina, la cual quedo como DM-365, “...*que, si bien tampoco se especifica para ello, resulta una medida adicional*”.³¹⁹
427. Ahora bien, toda vez que, a casi un año de notificarse el RG-017 y ante las diversas manifestaciones de Empalme de rechazar el reclamo, la CFE decidió ejercer sus derechos contractuales en términos del cobro de garantías ya que “... *el agravamiento de este Reclamo de Garantía condiciona la operación de las centrales Empalme I y Empalme II*”, por lo que procedió al cobro de las garantías para atender el caso.³²⁰

³¹⁵ Contestación a la Demanda, ¶ 2153.

³¹⁶ Contestación a la Demanda, ¶ 2155.

³¹⁷ Contestación a la Demanda, ¶ 2199.

³¹⁸ Contestación a la Demanda, ¶¶ 2160-2162, Ver Informe de la M. en G.A. Fátima Karmina Salas Salmerón, perito de CFE, Anexo 109.

³¹⁹ Contestación a la Demanda, ¶ 2168, haciendo referencia al oficio 7B/2019/RJMN-00450 del 22 de octubre de 2019 (Anexo D-720).

³²⁰ Contestación a la Demanda, ¶¶ 2178 y 2201.

428. Añade la Demandada que durante los meses de abril y mayo de 2021, las dos centrales, CC Empalme I y CC Empalme II, estuvieron operando conjuntamente sin problemas de abatimiento y a diferentes niveles de carga, así como todos los sistemas de Agua de Circulación, Agua de Enfriamiento Secundario, Agua de Alimentación a Evaporadoras, Agua a lavado de mallas, etc., es decir, todos los consumos que utilizan agua del cárcamo, estuvieron operando satisfactoriamente al 100 % de su capacidad, sin presentarse el problema de abatimiento del cárcamo.
429. En su Memorial de Conclusiones, la Demandada critica el para el análisis hecho por el perito de la Demandante –GPS– respecto del RG-017, ya que argumenta que no cuenta con estudios de biología marina,³²¹ puesto que se requieren de estudios especializados que respalden si la especificación de cloración era o no suficiente para el desarrollo de esa fauna marina.³²²
430. A su parecer, la Demandada sostiene que “[u]no de los aspectos que dejó de considerar [GPS], es que existió ausencia de la dosificación de hipocloración como medida de control a partir de febrero de 2017, momento en el que instalaron la tubería de los inmisarios terminando en febrero de 2018 –fecha en que hicieron la primera dosificación de acuerdo al sistema especificado en la sección 7.9.1.1– resultando que para ese tiempo ya era insuficiente, porque la dosificación de hipocloración, solo es un apoyo para mitigar las incrustaciones marinas en su fase larvaria, tal y como lo indica la especificación, siendo evidente que se iba a dar ese fenómeno de proliferación de *biofouling* por la falta de intervención oportuna, lo cual resultó de su entera responsabilidad.”³²³

RGs Atendidos por la Demandada.

431. El perito designado por la Demandada –Ing. Lorenzo José Cámara Anzures– cuantifica en \$37,494,469.66 M.N. el monto total de RGs que fueron atendidos por la CFE con recursos propios y con recursos derivados del ejercicio de la Carta de Crédito HSBC, e incluye en su Dictamen la tabla siguiente para identificar cuáles de los RGs fueron atendidos con cada una de dichas fuentes.

³²¹ Transcripción, día 16-02-2022, segunda parte, página 32.

³²² Memorial de Cierre CFE, ¶ 86.

³²³ Memorial de Cierre CFE, ¶ 93.

RG	C. C. HSBC	Recursos CFE
10	2,857,580.24	
17	19,977,969.18	4,088,772.61
20	153,791.03	
21	230,871.03	
22	317,981.79	
24	2,700,304.65	
29	532,083.50	200,000.00
32	457,774.39	
36	496,754.89	
42	1,950,000.00	
58	550,000.00	
73	391,636.51	
76	80,625.52	
89	250,000.00	
112	168,092.96	
113	51,822.86	
115	12,632.40	
119	273,123.33	
120	17,926.42	
168	26,257.60	
174	273,123.33	
178	7,839.60	
179	7,839.60	
180	29,280.00	

181	29,280.00	
182	11,040.00	
183	11,040.00	
186	10,738.89	
189	166,256.02	
190	649,744.74	
192	9,218.55	
198	20,224.40	
199	28,882.98	
200	28,882.98	
208	60,022.01	
221	11,348.90	
222	9,794.00	
224	20,097.92	
225	6,726.00	
227	7,115.63	
229	13,000.00	
230	12,809.23	
235	16,000.00	
236	4,360.00	
238	243,380.84	
243	7 823.10	
245	6,300.00	
246	6,300.00	
Total:	33,205,697.05	4,288,772.61

432. Llama la atención, sin embargo, que dicho perito no hace evaluación de los costos ni revisa la razonabilidad de los contratos suscritos por CFE para la atención de los RGs, sino que simplemente señala sobre el particular que: “... *en caso de que el Tribunal lo considere, la Comisión deberá acreditar dichas erogaciones, mediante la presentación de contratos adjudicados y pagos efectuados a los correspondientes contratistas*”.³²⁴

³²⁴ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001, ¶ 260.

433. En su Dictamen, el Ing. Cámara Anzures señala que los montos señalados en dicha tabla son los costos informados por la CFE en la atención de contratos específicos adjudicados.³²⁵
434. Igualmente llama la atención, no obstante, que aquellos RGs en la tabla que se encuentran “sombreados” son RGs que la Demandada sostiene han sido atendidos con recursos de la Carta de Crédito HSBC o recursos propios, pero que mantiene en la lista de RGs “Abiertos”.

Análisis del Tribunal Arbitral

435. El Tribunal estima que el punto de inicio para considerar este tema es la Cláusula 20 del Contrato (Garantías y Período de Garantía), ya que es en dicha disposición que las Partes pactaron las bases de responsabilidad para los trabajos por realizar por el contratista (Empalme).
436. La Cláusula 20.1 (Garantía Operativa) establece como sigue:

“El Contratista garantiza que las Obras relacionadas con la Central, una vez lograda la Aceptación Provisional, de la Central, cumplirán estrictamente con las Especificaciones del Contrato, y que estarán fabricadas y realizadas conforme a los Estándares de la Industria en forma técnicamente eficiente y completa, así como la continuidad de la operación de las Obras. Durante el Período de Garantía, el Contratista podrá verificar que la Central sea operada por la Comisión de acuerdo con el manual de operación de la Central. De encintar alguna anomalía en la operación de la Central, lo informará por escrito a la Comisión, quien deberá corregir dicha anomalía. No obstante la recepción formal de las Obras, el Contratista quedará obligado, a lo largo del Período de Garantía aplicable, a responder de los Defectos que resulten de las mismas, por vicios ocultos, y de cualquier otra responsabilidad en que hubiere incurrido, en los términos señalados en el presente Contrato y en el Código Civil Federal. En caso de disputa, las Partes sostendrán una reunión de comité consultivo términos de la cláusula 8, a efecto de resolver dicha controversia, de persistir el desacuerdo, se estará a lo dispuesto en la cláusula 30.2” [énfasis añadido]

437. A su vez, la Cláusula 20.9 (Limitaciones de las Garantías) dispone:

“El Contratista no será responsable por Defectos o Desperfectos en la Central, las Obras o los Materiales que sean causados por el uso y despaste normal, por la operación o mantenimiento inapropiado o inadecuado de la Central, por negligencia o alteraciones no autorizadas a las Obras o a los Materiales, con la excepción de trabajos llevados a cabo por la Comisión o terceros de conformidad con la Cláusula 20.6.” [énfasis añadido]

³²⁵ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001, ¶¶ 257-258

438. Por otra parte, la Cláusula 20.4 (Ampliación del Período de Garantía), impone al Contratista la obligación de garantizar por 1 año a partir de la reparación o reemplazo de todo Defecto o Desperfecto que hubiere sido ya reparado o reemplazado durante el Período de Garantía. Esta disposición establece:

“Si la Central no puede generar energía eléctrica debido a un Defecto o Desperfecto, el Período de Garantía aplicable será ampliado automáticamente por un periodo igual al tiempo durante el cual la Central, o la parte correspondiente, no puedan ser utilizadas por la Comisión. Además, el buen funcionamiento del Equipo Principal o de los Materiales que deben ser reparados o reemplazados durante el Período de Garantía, así como su carencia de Defectos o Desperfectos, quedará garantizado por el Contratista por el término de 1 (un) año a partir de la reparación o reemplazo de que se trate al quedar libre de Defecto y/o Desperfectos. En este caso, la Comisión tendrá derecho de pedirle al Contratista y este la obligación de entregar, una carta de crédito en un monto razonable y suficiente para asegurar el cumplimiento de la garantía de buen funcionamiento y ausencia de Defectos y Desperfectos del Equipo Principal o de los Materiales que deban ser reparados o reemplazados durante el Período de Garantía.” [énfasis añadido]

439. Los términos “Defecto” y “Desperfecto” tienen el significado que se les asigna en la Cláusula 1.1 (Definiciones).

*“1.1 **Definiciones.** Para los fines del presente Contrato, los términos que se listan en esta Cláusula 1.1, cuando su letra inicial se escriba con mayúscula, tendrán el significado que para cada uno de ellos se establece a continuación:*

...

*“**Defecto**” significa cualquier hecho, condición o evento que afecte una Obra o parte de la misma, y que haga o pueda hacer que dicha Obra no sirva a su propósito o función, sea total o parcialmente.*

...

*“**Desperfecto**” significa un evento que limita, total o parcialmente, la capacidad de generación, la eficiencia o la seguridad operativa de la Central, respecto de las Especificaciones del Contrato y el cual, si no es remediado pueda afectar la condición óptima de la Central.”*

440. Un factor que debe ser tomado en cuenta también consiste en los procesos establecidos en el Procedimiento de Gestión de RGs. Tal y como ha sido descrito en la sección de Antecedentes de este tema, dicho instrumento establece un proceso para la atención de las RGs que resulta no solo razonable sino indispensable a la luz de un proyecto tan complejo como la construcción y puesta en operación de la Central, en donde había una gran cantidad de personal de cada una de las Partes en sitio. Por ello se estableció la

necesidad de cada una de ellas designar a un “Responsable de Garantía”, a fin de que la comunicación entre ambos fuere directa y constante respecto de cualquier RG detectado durante la operación y mantenimiento de la Central.³²⁶

441. En segundo lugar, resultaba necesario un protocolo para la comunicación de todo RG por CFE a Empalme. Por ello, se estableció que debía todos los RG “*se iniciarían mediante oficio dirigido por CFE al [Responsable de Garantía de Empalme], solicitando una evaluación y atención por parte del Contratista*”. Para ello se definió el formato que debía ser utilizado como un anexo. Empalme debía entonces “*determinar la procedencia o improcedencia del RG y, en caso de procedencia establecer el plan de acción que se realizará*”. En caso de que un RG fuera rechazado por Empalme, la CFE podría “*atenderla directamente y de acreditarse que provenía de una responsabilidad atribuible al Contratista, este último estará obligado a reembolsar los costos directos, razonales y documentados a CFE ...*”.³²⁷
442. A fin de asegurar que había un proceso de notificación, gestión, resolución y seguimiento del RG, las Partes acordaron también un protocolo que requería una codificación con numeración consecutiva de cada RG. Una vez recibida por Empalme, debía responder dentro de las 48 horas siguientes y señalar una de cuatro opciones: (i) aceptada; (ii) pendiente de información; (iii) pendiente de investigación; o (iv) rechazada.
443. Si un RG fuere a ser rechazado, el Responsable de Garantía de CFE debía responder y expresar por escrito su desacuerdo a Empalme dentro de los 7 (siete) días siguientes. En caso de omisión en el envío de dicho desacuerdo, “*... se interpretará la aceptación de CFE, por lo que el RG quedará rechazado definitivamente*”.³²⁸ Sin embargo, si fuere a ser atendido algún RG por Empalme, entonces procedía que, una vez realizados los trabajos correspondientes y teniendo los equipos operando de manera confiable y dentro de los parámetros operativos, Empalme podría enviar una comunicación dando por cerrado el RG. Después, la CFE podría “*... presentar sus observaciones a dicho cierre durante el transcurso de los siguientes 14 Días. En caso de no recibir una respuesta del Cliente, el RG se dará por cerrado*”.³²⁹
444. Atento a lo anterior, al analizar cualquier Reclamo de Garantía o RG, el Tribunal debe tomar en cuenta, por ende, que éste debe estar comprendido y alcanzar todos los requisitos contractualmente establecidos. En breve:

³²⁶ Ver inciso 6.1 del Procedimiento de Gestión de RGs.

³²⁷ Inciso 8.2 del Procedimiento de Gestión de RGs.

³²⁸ Inciso 8.3.2 del Procedimiento de Gestión de RGs.

³²⁹ Inciso 8.3.4 del Procedimiento de Gestión de RGs

- a) Debe surgir y ser notificado durante el Periodo de Garantía;
- b) Debe tratarse de un “*hecho, condición o evento que afecte una Obra o parte de la misma, y que haga o pueda hacer que dicha Obra no sirva a su propósito o función, sea total o parcialmente*”, así como un vicio oculto u otra responsabilidad bajo el Contrato y/o el Código Civil Federal;
- c) Quedan excluidos aquéllos que sean causados por el uso y desgaste normal, o por la operación o mantenimiento inapropiado o inadecuado de la Central; y
- d) Debe haberse satisfecho el procedimiento de Gestión de RGs.

445. Si algún RG presentado por la Demandada no satisface estos requisitos, el Tribunal habrá de rechazarlo.

446. En el dictamen pericial aportado por la Demandante³³⁰ se incluye la siguiente tabla que contiene el estado que guardaban las RGs al 14 de enero de 2021. Se identifican aquéllos cobrados dentro de la Carta de Crédito HSBC y los que no lo fueron:

Tabla 14. Estado de Reclamos de Garantía al 14 de enero de 2021

ESTADO	EJECUTADOS EN CARTA DE CRÉDITO	NO EJECUTADOS EN CARTA DE CRÉDITO	TOTAL	%
CERRADO	1	36	37	14.98%
CIERRE AUTOMÁTICO	12	13	25	10.12%
RECHAZADO	15	70	85	34.41%
EMITIDAS CON POSTERIORIDAD AL 09 JUN/19	39	40	79	31.98%
SIN PROPUESTA CIERRE	6		6	2.43%
SOLICITUD DE CIERRE PRESENTADA		6	6	2.43%
SOLICITADO EN DESACUERDO	9		9	3.64%
TOTAL	82	165	247	100.0%
%	33.2%	66.8%	100%	

447. El Tribunal analiza a continuación los RGs en las distintas categorías. En primer lugar, aquéllos que son rechazados sin un mayor análisis por ser extemporáneos, repetidos o cubiertos por DMs.

RGs fuera del Periodo de Garantía.

³³⁰ Dictamen GPS I, Anexo P088.

448. El Tribunal ha ya resuelto en apartado anterior de este Laudo que el Período de Garantía venció el 2 de julio de 2019 y no, como lo argumentó la Demandante, el 9 de junio de 2019.
449. Toda vez que es la propia Demandada quien tomó la posición de que el Período de Garantía venció el 2 de julio de 2019, resulta claro entonces que existen 16 (dieciséis) RGs que la Demandada señala que se encuentran “Abiertos” y deben ser considerados como improcedentes, simplemente porque fueron presentados después del vencimiento. Estos son aquéllos incluidos dentro de la siguiente relación:

RG	Posición de CFE	Status	Fecha Presentación
233	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
237	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
238	Parcialmente atendido con recursos de Carta de Crédito	Abierto	22 de julio de 2019
239	No se ha adjudicado el Contrato para la atención	Abierto	22 de julio de 2019
240	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
241	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
244	No se ha adjudicado el Contrato	Abierto	22 de julio de 2019
248	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
249	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
250	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
251	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
252	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
253	Pendiente de atención por Empalme	Abierto	22 de julio de 2019
254	No se ha adjudicado el Contrato para la atención	Abierto	22 de julio de 2019
255	No se ha adjudicado el Contrato para la atención	Abierto	22 de julio de 2019
256	Pendiente de atención por Empalme	Abierto	22 de julio de 2019

RGs Duplicados o Atendidos como DMs.

450. También deben ser rechazados 19 (diecinueve) RGs que se encuentran duplicados, que GPS señala fueron reconocidos por la Demandada en su Memorial de Contestación: Nos. RG-034, RG-062, RG-063, RG-089, RG-091, RG-093, RG-096, RG-097, RG-099, RG-101, RG-102, RG-108, RG-122, RG-123, RG-145, RG-159, RG-163, RG-201, RG-202.³³¹
451. Igualmente, deben rechazarse aquéllos 11 (once) RGs que fueron atendidos por la Demandante como “Deficiencias Menores” o DMs. En este grupo se encuentran:

14	Se atendió a través de la DM-392
45	Se atendió a través de la DM-546
50	Se atendieron a través de las DMs: DM-285, DM-316, DM-317 y DM-318
70	Se atendió a través de la DM-534
89	Se atendió a través de la DM-546
119	Se encuentra considerada en la DM 352
122	Se atendió a través de la DM-215
172	Se atendió a través de la DM-356
174	Se atendió a través de la DM-352
176	Se atendió a través de la DM-114
203	Se atendió a través de la DM-287
228	Se atendió a través de la DM-287

452. El resto de los RGs puede dividirse entre: (a) aquellos que la Demandada estima se encuentran ya “Abiertos” y (b) aquéllos que se encuentran “Cerrados”. Dentro de estos últimos, es decir, de lo que CFE estima están “Cerrados”, la Demandante identifica que algunos lo fueron con recursos provenientes de la indebida ejecución de la Carta de Crédito HSBC.

³³¹ Ver Dictamen GPS II, Anexo A-100 (Tabla estatus DMs y RGs).

RGs que no Constituyen “Defectos” o Vicios Ocultos

453. El Tribunal ha analizado y rechaza aquéllos RGs que no constituyen un “Defecto”, “Desperfecto”, un vicio oculto u otra responsabilidad bajo el Contrato y/o el Código Civil Federal.
454. En la lista que se incluye a continuación se incluyen 31 (treinta y un) RGs cuyo común denominador –que constituye el motivo de rechazo– es que se trata de artículos (plataformas) excluidas del alcance del Contrato. El Dictamen GPS examina todos ellos y llega a la conclusión de que las plataformas no fueron parte de la ingeniería contratada. Es decir, no se trató de equipo en mal funcionamiento o “defectos” responsabilidad de Empalme.³³² La Demandada tuvo oportunidad de objetar el rechazo original de la Demandante del 11 de junio de 2019, pero no lo hizo oportunamente:

No.	Naturaleza del RG	Análisis
132	Instalación de plataforma para acceder a la válvula de control de flujo mínimo de la Bomba "A" de Agua de Alimentación de Media Presión del GVRC 1	No corresponde a un RG
133	Instalación de plataforma para acceder a la válvula de control de flujo mínimo de la Bomba "B" de Agua de Alimentación de Media Presión del GVRC 1	No corresponde a un RG
134	Instalación de plataforma para acceder a la válvula de control de flujo mínimo de la Bomba "A" de Agua de Alimentación de Media Presión del GVRC 1	No corresponde a un RG
135	Instalación de plataforma para acceder a la válvula de control de flujo mínimo de la Bomba "B" de Agua de Alimentación de Media Presión del GVRC 1	No corresponde a un RG
136	Instalación de plataforma para acceder a la válvula de control de Agua de Alimentación a la Atemperación de AP	No corresponde a un RG
137	Instalación de plataforma para acceder a la válvula de control de Agua de Alimentación a la Atemperación de AP	No corresponde a un RG
138	Instalación de plataforma para acceder a la válvula de control de Agua de Alimentación a la Atemperación de MP	No corresponde a un RG
139	Instalación de plataforma para acceder a la válvula de control de Agua de Alimentación a la Atemperación de MP	No corresponde a un RG

³³² Ver Dictamen GPS II, Apéndice No. 02 (Análisis Técnico GPS Reclamos de Garantía), págs. 72 a 120.

No.	Naturaleza del RG	Análisis
140	Instalación de plataforma para acceder a la válvula de control de flujo mínimo de la Bomba "B" de Agua de Alimentación de Alta Presión	No corresponde a un RG
141	Instalación de plataforma para acceder a la válvula de control de flujo mínimo de la Bomba "A" de Agua de Alimentación de Alta Presión	No corresponde a un RG
142	Instalación de plataforma para acceder a la válvula de control de flujo mínimo de la Bomba "B" de Agua de Alimentación de Media Presión	No corresponde a un RG
143	Instalación de plataforma para acceder a la válvula de control de flujo mínimo de la Bomba "A" de Agua de Alimentación de Alta Presión	No corresponde a un RG
144	Instalación de plataforma para acceder a la válvula repartidora de caudal RH Frio al GVRC 1	No corresponde a un RG
146	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
147	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
148	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
149	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
150	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
151	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
152	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
153	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
154	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
155	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG

No.	Naturaleza del RG	Análisis
156	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
157	Instalación de plataforma para la atención a anomalías y mantenimiento de válvulas motorizadas	No corresponde a un RG
158	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
160	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
161	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
162	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula motorizada	No corresponde a un RG
170	Instalación de plataforma para la atención a anomalías y mantenimiento de la válvula en línea de Dren del Bypass de Baja Presión del GVRC 2 al Tanque Atmosférico	No corresponde a un RG
171	Instalación de plataforma para acceder al Transmisor de Temperatura instalado en la línea del dren de recalentado caliente a tanque atmosférico	No corresponde a un RG

455. Por otra parte, existen otros 31 (treinta y un) RGs que la Demandada sostiene que se encuentran “Cerrados” por trabajos realizados por CFE o contratados por CFE, cuyos RGs fueron presentados dentro del Periodo de Garantía (es decir, antes del 2 de julio de 2019). No obstante que en sus escritos la Demandante pretendía rechazarlos en la medida en que habían sido presentados después del 9 de junio de 2019, el perito GPS hace un análisis de su procedencia, que el Tribunal comparte.³³³

RG	Naturaleza del RG	Análisis
24	Se tiene que simular la temperatura del tanque de purga intermitente de los GVRC 1/2 para la apertura de la válvula de drenaje de purga intermitente	CFE realizaba purgas excesivas sin seguir las curvas de arranque que corresponden a las condiciones normales estimadas por la ingeniería, pero Empalme no solicitó el cierre formal.
178	Filtros de succión	Corresponden a actividades de mantenimiento preventivo y predictivo

³³³ Ver Dictamen GPS II, Apéndice No. 02 (Análisis Técnico GPS Reclamos de Garantía), págs. 72 a 120

RG	Naturaleza del RG	Análisis
179	Filtros de succión	Corresponden a actividades de mantenimiento preventivo y predictivo
184	Limpieza de alabes primera y segunda rueda de entrada al compresor TG1	Corresponden a actividades de mantenimiento preventivo y predictivo
185	Limpieza de alabes primera y segunda rueda de entrada al compresor TG1	Corresponden a actividades de mantenimiento preventivo y predictivo
186	Aislamiento dañado en cuerpo de turbina de gas TGI	Situaciones previsibles de desgaste y desajuste de las partes y dispositivos
188	Humedad en cuarto eléctrico de media tensión	Situación previsible de desgaste
189	Tuberías con trazas eléctricas sin aislamiento térmico	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
190	Guía del vástago de compuerta suelto por presentar atoramiento en compuerta	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
192	El manómetro en cuestión en el sistema de enfriamiento con Hidrógeno del generador eléctrico de la TG2 carece de aguja de medición	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
193	En ambas tarjetas principal y redundantes del gabinete 11CJP41 (de protecciones) las tarjetas SIMATIC ET 200m/link con señal de falla.	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme Recursos de la Carta de Crédito
196	Cambio de giro del ventilador SAM30AN001	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
197	Cambio de giro del ventilador SAM30AN001	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
198	No se cuenta con válvulas aisladoras en secador de hidrogeno del generador eléctrico de la unidad de vapor	Cambio no previsto en el contrato. Se trata de ingeniería aprobada
199	Tablero dañado por corrosión del sistema contra incendio FM200 del recinto de la turbina de gas TG1	Corresponden a actividades de mantenimiento preventivo

RG	Naturaleza del RG	Análisis
200	Tablero dañado por corrosión del sistema contra incendio FM200 del recinto de la turbina de gas TG2	Corresponden a actividades de mantenimiento preventivo
206	Fuga por flecha bomba levante con un escurrimiento constante ocasionando que el piso este impactado por aceite	Las fugas debidas a empaques afectados de la bomba de lubricación que deben ser reemplazados en actividades de mantenimiento
208	Dos fugas de hipoclorito en tubería de dosificación del sistema hipoclorador	No le corresponde a Empalme ninguna responsabilidad en problemas originados por la incrustación de <i>biofouling</i> al interior de las tuberías de descarga y en las tuberías de dosificación de cloro
216	Suciedad tablero de protecciones CHA01 del paquete eléctrico TG2	Corresponden a actividades de mantenimiento preventivo
218	Aislamiento dañado en cuerpo de turbina de gas TGI	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
220	Apretar tornillería en bridas en parte lateral del ducto de transición de gases en TGI	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
221	Falta recubrimiento anticorrosivo en áreas de soldaduras en el compresor del compresor de las TGI y TGII	Por condiciones del medio se aceleran procesos de corrosión. Corresponden a actividades de mantenimiento preventivo
222	Lamina desprendida en pared de caja de aire en la TGII	No corresponde a un vicio oculto, defecto o reclamo de garantía
223	Tornillo de la tuerca de ajuste con daño	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
224	Se requieren que se retiren Cáncamos soldados en estructura de la TGI y TG II utilizados para maniobras durante la instalación del compresor por ser un riesgo	Es práctica habitual mantener los puntos de izaje en los equipos mayores para su utilización durante los trabajos de mantenimiento mayor.
225	Ángulos soldados en estructura de la TGI obstruyen el paso a personal	Debió de ser atendido por EMPALME en la etapa de construcción, pero no se trata de vicio oculto o defecto.
227	Mal sellado de laminación en ducto de calentamiento de aire en la TGI	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme

RG	Naturaleza del RG	Análisis
229	Falta de canalización del multiconductor de control del tornaflecha de la tv	El reclamo de garantía corresponde a una modificación adicional del diseño de ingeniería y no un Defecto.
230	Se encuentra aceite en la línea de ascenso y descenso de escalera marina de tanque principal de turbina de vapor	No se trata de un Defecto o vicio oculto.
231	En los sensores de presión dinámica 11MBM12EU001 y 11MBM12EU010 (LFD1 Y HFD4 respectivamente), se tiene señales altas aleatoriamente	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme
232	Se daña HVAC #3 del paquete eléctrico TG1, no trabaja y brinca la secuencia	Corresponden a actividades de mantenimiento preventivo

456. Los siguientes 4 (cuatro RGs) fueron presentados después del 9 de junio de 2019, pero antes del 2 de julio del mismo año. Aunque GPS los rechaza por ser “extemporáneos” (que no lo son), reconoce no obstante en su Dictamen que constituyen pendientes de construcción y por tanto corresponde a la Demandante atenderlos.

RG	Naturaleza del RG	Análisis
180	No se cuenta con el <i>aterrizamiento</i> eléctrico adecuado	Corresponde a un pendiente de construcción. <i>Pendiente de atención por Empalme</i>
181	No se cuenta con el <i>aterrizamiento</i> eléctrico adecuado	Corresponde a un pendiente de construcción. <i>Pendiente de atención por Empalme</i>
182	Faltan tierras conectadas a tapas de los acoplamientos del generador eléctrico TG1	Corresponde a un pendiente de construcción. <i>Pendiente de atención por Empalme</i>
183	Faltan tierras conectadas a tapas de los acoplamientos del generador eléctrico TG2	Corresponde a un pendiente de construcción. <i>Pendiente de atención por Empalme</i>

RGs que CFE estima “Abiertos”

457. La Demandada ha identificado una lista de 93 (noventa y tres) RGs que estima se encuentran “Abiertos”.³³⁴ De ese total quedan 45 (cuarenta y cinco), una vez que se deducen los siguientes:

- a) 16 (dieciséis) RGs que han sido rechazados ya por el Tribunal en la medida en que fueron presentado fuera del Periodo de Garantía que venció el 2 de julio de 2019;
- b) 18 (dieciocho) RGs duplicados;
- c) 10 (diez) RGs atendidos como DMs; y
- e) 4 (cuatro) RGs que el propio perito GPS ha reconocido que son procedentes, pero que habían sido rechazados por haber sido presentados después del 9 de junio de 2019.

RG	Naturaleza del RG	Posición CFE	Posición Empalme
13	Falla en la pantalla <i>touch panel</i> local del AVR y SFC de la TG1	Procede conforme a cláusula 11.3 del Contrato. Sin embargo, CFE no ha adjudicado contrato para atención.	Atendida, y reincidencia notificada extemporánea.
14	Problemática de armónicos que se está presentando durante el arranque de las TG1 y TG2	No se ha suscrito Contrato para su atención	Duplicado con DM-392. No procede
17	Problemática de abatimiento del cárcamo de bombeo se debía a la proliferación de <i>biofouling</i> (acumulación biológica de microorganismos) debido al criterio de dosificación de hipoclorito especificado en el Contrato.	Atendido con recursos de la Carta de Crédito	Los problemas presentados no son imputables a Empalme, sino a las incorrectas especificaciones de cloración definidas por CFE. No procede conforme a análisis particular.
19	Intercambiadores de calor causan temperatura de aceite de control de 50 °C en TG2, mientras que en TG1 está en servicio un solo intercambiador con una temperatura de 40°C, estos equipos son para el 100 %	Abierto	Empalme realizó labores de limpieza de los intercambiadores y verificación de la lógica de funcionamiento de los mismos, quedando pendiente la verificación con la turbina en línea, actividad que dependía de licencias de la

³³⁴ Esta relación se desprende del Anexo A-100 – Tabla estatus DMs y RGs.

RG	Naturaleza del RG	Posición CFE	Posición Empalme
			CFE, las cuales no fueron concedidas. Pendiente de cierre
21	Las señales de los elementos de temperatura del bypass de media presión (grado de sobrecalentamiento) están simulados	Cerrado con recursos de la Carta de Crédito	El responsable de CFE para gestión de RGs, (RCRG), direccionó al designado de Empalme a gestionar las intervenciones con otras dependencias de CFE, por lo que desvió la secuencia de responsabilidades. Pendiente de cierre
22	Simulación recurrente que durante las maniobras de acople del tren 1 o tren 2.	En proceso de atención con recursos de la Carta de Crédito	Los trabajos requeridos para el cierre de este RG no se ejecutaron por falta de coordinación con la CFE de la fecha para realizarlos durante una parada de planta. Pendiente de cierre
28	Deficiencias en registrador de disturbios del Generador Eléctrico de la Turbina de Vapor		Empalme atendió el reclamo de garantía y notificó a la CFE en el formulario de cierre. Cierre automático por falta de objeciones en plazo. No procede
29	Anomalías de la caja de engranes de la evaporadora, esto derivado de comportamiento fuera de rango de las vibraciones.	En proceso de atención con recursos de la Carta de Crédito	Corresponden a actividades de mantenimiento preventivo y predictivo. No procede
40	Cables de fuerza de las bombas de abastecimiento de agua de mar (circuito abierto) se está degradando por humedad por constante derrame de agua de sellos		Se trata de situaciones previsibles de desgaste y deficiencias en los procesos de operación y mantenimiento. No procede
65	Daño al motor del actuador, válvula motorizada de corte para el control del nivel del	No se ha suscrito Contrato para su atención	Empalme atendió el reclamo de garantía y notificó a la CFE en el formulario de cierre. Cierre

RG	Naturaleza del RG	Posición CFE	Posición Empalme
	domo de baja presión del recuperador GVRC #1,		automático por falta de objeciones en plazo. No procede
66	Instalación de plataforma para poder darle atención a las anomalías y mantenimientos de las válvulas motorizadas	Pendiente de atención por Empalme	No se trata de un Defecto o vicio oculto
68	Instalación de plataforma para poder darle atención a las anomalías y mantenimientos de las válvulas motorizadas	Pendiente de atención por Empalme	No se trata de un Defecto o vicio oculto
69	Instalación de plataforma para poder darle atención a las anomalías y mantenimientos de las válvulas motorizadas	Pendiente de atención por Empalme	No se trata de un Defecto o vicio oculto
71	Poner en servicio el sistema de monitoreo de desgaste de escobillas de TV	No se ha suscrito Contrato para su atención	Se atendió en DM-183 y notificó a la CFE en el formulario de cierre. Cierre automático por falta de objeciones en plazo. No procede
73	Sistema de Regulación de Frecuencia no realiza su función de manera adecuada.	En proceso de atención con recursos de la Carta de Crédito	RG atendida. No procede
81	Canalizar el camino de acceso a los motore	Pendiente de atención por Empalme	RG presentó dos casos diferentes, una canalización y un riel para un polipasto, lo cual desvía el propósito del Procedimiento de Gestión de RGs. Cierre automático por falta de objeciones al rechazo en plazo.
82	Atención a múltiples alarmas suprimidas y presente en el sistema T3000, correspondiente a las TG 1 y TG2		Relacionado con la DM-444, ejecutada por la CFE con carta de crédito. Empalme envió a la CFE el costo de ejecución de los

RG	Naturaleza del RG	Posición CFE	Posición Empalme
			trabajos cotizado por de Schneider, sin respuesta. Pendiente de cierre
83	Alarmas correspondientes al sistema de paro de emergencia en la válvula de control y corte de gas de la TG2	Atendido con recursos de la Carta de Crédito	Los problemas presentados derivan de mala operación por parte de CFE (deficiencia de la operación de la CFE al no aplicarse el reset a las alarmas). No procede
88	Instalación de plataforma para acceder a la parte superior de tanques de sustancias químicas para reposiciones	Pendiente de atención por Empalme	No se trata de un Defecto o vicio oculto No procede
94	Se requiere que se ponga riel y polipasto para izaje de las válvulas motorizadas	Pendiente de atención por Empalme	La instalación adicional de polipastos y accesorios asociados para mantenimiento no corresponde a Defecto o vicio oculto. No procede
95	Se requiere que se ponga riel y polipasto para izaje de las válvulas motorizadas	Pendiente de atención por Empalme	La instalación adicional de polipastos y accesorios asociados para mantenimiento no corresponde a Defecto o vicio oculto. No procede
98	Se requiere que se ponga plataforma para poder darle atención a las anomalías y mantenimientos de las válvulas motorizadas	Pendiente de atención por Empalme	La instalación de plataformas y accesorios asociados para mantenimiento no corresponde a Defecto o vicio oculto. No procede
111	Baja capacidad de producción de la evaporadora (por debajo de los 34 M3/Hora)	Pendiente de atención por Empalme	La evaporadora cumple con el desempeño exigido en el Contrato Los problemas presentados derivan de mala operación por parte de CFE. No procede

RG	Naturaleza del RG	Posición CFE	Posición Empalme
112	Presentó alarma y disparo del equipo dejando fuera de servicio el equipo del Acondicionador de Aceite de la Turbina de Vapor.	Se atiende con Contrato con Dosan Skoda.	El evento corresponde a acciones entre el operador y mantenimiento de la CFE, de manera que se tomen las acciones preventivas que pretenden las alarmas para evitar la salida de operación de los equipos No procede
113	Problemática de corrosión en tubería del Sistema de Limpieza de las Mallas Giratorias Tarnos.	En proceso de atención con recursos de la Carta de Crédito	Cierre automático. Reincidencia notificada extemporánea. No procede
125	Montar Registrador de Disturbios al Sistema de Excitación de la TG2	Pendiente de atención por Empalme	Los registradores de disturbios están instalados conforme a la ingeniería y especificaciones de los fabricantes de los equipos. Además, fueron atendidas las DM-416, DM-425 y DM-384 que solicitaban la verificación y pruebas de los equipos. No procede
126	Montar Registrador de Disturbios al Sistema de Excitación de la TG1	Pendiente de atención por Empalme	Los registradores de disturbios están instalados conforme a la ingeniería y especificaciones de los fabricantes de los equipos. Además, fueron atendidas las DM-416, DM-425 y DM-384 que solicitaban la verificación y pruebas de los equipos. No procede
129	Suministrar en cada tablero de subestaciones unitarias dos interruptores de reserva para usos futuros		La instalación cumple con especificaciones y no se trata de un Defecto o vicio oculto No procede

RG	Naturaleza del RG	Posición CFE	Posición Empalme
130	Suministrar en cada tablero de subestaciones unitarias dos interruptores de reserva para usos futuros		La instalación cumple con especificaciones y no se trata de un Defecto o vicio oculto No procede
174	Daños severos en sus componentes, vástago, asiento móvil, asiento fijo y cuerpo interno (golpes)		Duplicado con DM-352, que procede. Debe considerarse cerrado.
187	Desprendimiento de pintura en todas las guarniciones de la central	Se procedió a atenderse con recursos propios de la CFE	Se trata de situaciones previsibles de desgaste. No procede
191	El termostato correspondiente al paquete mecánico (ACEITE DE LUBRICACION) de la TG1 no funciona adecuadamente	No se ha suscrito Contrato. Recursos de la Carta de Crédito	Se trata de situaciones previsibles de desgaste. CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme. No procede
194	Colocación de andamio para el acceso y tener un área de trabajo debido a la falta de plataforma.	Pendiente de atención por Empalme	No se trata de un Defecto o vicio oculto No procede
195	Colocación de andamio para el acceso y tener un área de trabajo debido a la falta de plataforma.	Pendiente de atención por Empalme	No se trata de un Defecto o vicio oculto No procede
204	Daños en el ventilador del sistema de calefacción del tablero del sistema contraincendio fm-200 de la caseta del colector de escobillas de la TG2.	Pendiente de atención por Empalme. Recursos de la Carta de Crédito	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme. No procede
205	Daños en ventiladores y sistema calefacción del tablero sistema FM-200 del recinto de la turbina de gas de la TG2	Pendiente de atención por Empalme. Recursos de la Carta de Crédito	CFE no sustenta que el evento haya ocurrido mientras la Planta estaba bajo la responsabilidad de Empalme. No procede

RG	Naturaleza del RG	Posición CFE	Posición Empalme
207	Escurremientos que forman gotas de aceite impactando el área de los paquetes de lubricación de las turbinas de gas	No se ha suscrito Contrato. Recursos de la Carta de Crédito	Corresponden a actividades de mantenimiento preventivo. No procede
209	Falla en los termopares de los combustores en la TG1	No se ha suscrito Contrato. Recursos de la Carta de Crédito	Duplicado con RG-064 No procede
210	Falla en los termopares de los combustores en la TG2	No se ha suscrito Contrato. Recursos de la Carta de Crédito	Duplicado con RG-064 No procede
211	El tablero de control y fuerza de la grúa de obra de toma, en el cual se encuentran los variadores de velocidad y la electrónica, así como el sistema del radio control, no es para intemperie se requiere tipo NEMA 4	Pendiente de atención por Empalme	El tablero suministrado cumple con las especificaciones y los requerimientos para operación a intemperie. No procede
212	El acceso obstruido por tubería contra incendio a tablero de control y fuerza del transformador auxiliar de la TG1	Pendiente de atención por Empalme	La interferencia de tuberías del sistema contraincendios con el acceso al área del transformador auxiliar en TG1, fueron de conocimiento de las partes en la ingeniería y debió ser modificado, de haber sido aplicable, durante la construcción. No es Defecto o vicio oculto.
213	El acceso obstruido por tubería contra incendio a tablero de control y fuerza del transformador auxiliar de la TG2	Pendiente de atención por Empalme	La interferencia de tuberías del sistema contraincendios con el acceso al área del transformador auxiliar en TG1, fueron de conocimiento de las partes en la ingeniería y debió ser modificado, de haber sido aplicable, durante la construcción. No es Defecto o vicio oculto.

RG	Naturaleza del RG	Posición CFE	Posición Empalme
215	Falla en el interruptor de enlace para que realice la transferencia automática tomando la carga la 10bma12, el cual se pierden cargas como los HVAC del edificio eléctrico y de control y el transformador de aislamiento del inversor	Pendiente de atención por Empalme	Cumple con las especificaciones, y no corresponde a ninguna anomalía, defecto, mal funcionamiento ni vicio oculto, sino que se trata de una condición que se solventa operando el sistema conforme al manual de operación.
217	No cuentan con piso sólido sin huecos en el banco de baterías del paquete eléctrico TG2	No se ha suscrito Contrato. Recursos de la Carta de Crédito	Corresponde a pendientes de construcción que debieron corregirse conforme al proceso de control y aseguramiento de calidad. No es Defecto o vicio oculto.
219	Se requiere de acceso mediante andamios para hacer la limpieza de los filtros de cada combustor debido a que no cuenta con plataforma	Pendiente de atención por Empalme	La instalación adicional de polipastos y accesorios asociados para mantenimiento no corresponde a Defecto o vicio oculto.

458. El Tribunal toma nota que conforme al Procedimiento de Gestión de RGs se dispone que:

“Ante el rechazo de un RG, CFE tendrá 7 días para responder al Contratista por escrito su desacuerdo. Cuando el Contratista no reciba notificación por escrito en el plazo indicado, se interpretará la aceptación de CFE, por lo que el RG quedará Rechazado definitivamente.”³³⁵

459. Además, el Tribunal toma en cuenta que, respecto a los RG de “cierre automático”, las Partes acordaron que una vez que hubieran sido realizado los trabajos de reparación, y CFE no se hubiera pronunciado sobre los mismos o sobre la solicitud de cierre hecha por Empalme durante los 14 Días siguientes a dicha solicitud, “el RG se dará por cerrado”.³³⁶ El perito GPS listó aquellos casos en los que la Demandada no emitió una respuesta oportuna a la solicitud de cierre de Empalme de acuerdo con lo previsto en el Procedimiento de Gestión de RGs, o simplemente no emitió una respuesta y luego

³³⁵ Procedimiento de Gestión de RGs, Sección 8.2, tercer párrafo siguiente al enunciado de dicha Sección.

³³⁶ Procedimiento de Gestión de RGs, Sección 8.3, 4.

en el Memorial de Contestación determinó que esos RGs no habían sido atendidos. Son un total de 31 (treinta y un) RGs.³³⁷

460. Al igual, existía un tratamiento similar cuando, una vez atendido un RG, no se pone en servicio el equipo por causas ajenas a Empalme. En estos casos, el RG “*se cerrara (sic) en automático*”.³³⁸
461. Es cierto, como lo argumenta la Demandante que, en vez de referir o argumentar respecto de la procedencia o improcedencia del cierre automático o el rechazo definitivo conforme al Procedimiento de Gestión de RGs, la Demandada presentó en múltiples casos en su Memorial de Contestación un análisis y razonamiento de carácter técnico para justificar su posición para cada uno de estos RGs. Es decir, pretende introducir un análisis para intentar justificar su procedencia cuando las partes acordaron un proceso que, al omitir seguirlo, tendría consecuencias de un cierre automático. Si CFE deseaba hacer un análisis respecto al hecho de que no era procedente la atención del RG, debía hacerlo en los periodos establecidos en el Procedimiento de Gestión de RGs. Al omitirlo, debe considerarse, tal y como está establecido en el documento, que procede el “cierre automático” del RG.
462. De los 45 (cuarenta y cinco) RGs que la Demandada estima se encuentran “Abiertos”, el Tribunal estima que 5 (cinco) se encuentran efectivamente “Abiertos” ya que corresponden a Defectos o vicios ocultos u otras responsabilidades cubiertas al amparo del Contrato. El resto se trata de reclamos que no estaban cubiertos por ser temas no contratados, fuera de especificaciones, que no constituyen un Defecto o vicio oculto, o se trata de responsabilidades por falta de mantenimiento o mal manejo de CFE.
463. El Tribunal concluye que los 5 (cinco) RGs en esta categoría que son responsabilidad de Empalme son:

No.	Descripción del Reclamo de Garantía
19	Intercambiadores de calor causan temperatura de aceite de control de 50 °C en TG2, mientras que en TG1 está en servicio un solo intercambiador con una temperatura de 40°C, estos equipos son para el 100 %

³³⁷ Dictamen GPS II, ¶¶ 101 y 102. Ver tabla 6 (RG Sin Respuesta Oportuna por parte de la CFE). Se trata de los Reclamos de Garantía RG-013, RG-023, RG-025, RG-027, RG-028, RG-036, RG-037, RG-041, RG-042, RG-056, RG-060, RG-062, RG-063, RG-065, RG-071, RG-074, RG-077, RG-080, RG-084, RG-085, RG-090, RG-092, RG-105, RG-118, RG-120, RG-121, RG-129, RG-130, RG-131, RG-168.

³³⁸ Procedimiento de Gestión de RGs, Sección 6.1.b).

21	Las señales de los elementos de temperatura del bypass de media presión (grado de sobrecalentamiento) están simulados
22	Simulación recurrente que durante las maniobras de acople del tren 1 o tren 2.
24	Atención a la recurrente simulación de la temperatura del tanque de purga intermitente de los GVRC 1 y 2 para la apertura de la válvula de drenaje de purga intermitente
82	Atención a múltiples alarmas suprimidas y presente en el sistema T3000, correspondiente a las TG 1 y TG2

464. Estos DGs son en adición a los que el propio perito de la Demandante reconoce que eran procedentes a pesar de haber sido presentados después del 9 de junio de 2019, pero que el Tribunal estima se encuentran dentro del Período de Garantía por lo expuesto anteriormente en este Laudo.

No.	Descripción del Reclamo de Garantía
180	No se cuenta con el aterrizamiento eléctrico adecuado
181	No se cuenta con el aterrizamiento eléctrico adecuado
182	Faltan tierras conectadas a tapas de los acoplamientos del generador eléctrico TG1
183	Faltan tierras conectadas a tapas de los acoplamientos del generador eléctrico TG2

RG-017

465. Por los montos aplicados por la Demandada en la atención del Reclamo de Garantía RG-017, además del interés presentado por las partes en sus escritos³³⁹ y peritajes,³⁴⁰ así como la atención prestada al tema durante la Audiencia, merece análisis particular la decisión del Tribunal.

³³⁹ Memorial de Demanda, ¶¶ 937-940, Memorial Pre-Audiencia Empalme, ¶¶ 130-137, Memorial de Cierre Empalme, ¶¶ 26-28, Contestación a la Demanda, ¶¶ 2147-2210, Memorial de Cierre CFE ¶¶ 86-94

³⁴⁰ Dictamen Pericial H2O (AP-004), Dictamen GPS II, Apéndice No. 02 (Análisis Técnico GPS Reclamos de Garantía), Dictamen Pericial Ing. Cámara Anzures (Anexo DP-001), e Informe Maestra Fátima Salas, perito de CFE (Anexo 109).

No.	Descripción del Reclamo de Garantía	Carta de Crédito	Recursos CFE
17	Se observa bajo nivel en cárcamo obra de toma, aun teniendo estranguladas las salidas de las cajas del condensador de empalme i al 50 %, y las cajas de la salida del condensador de EMPALME II al 37%, operando alarma de bajo nivel. se adjuntó datos del día sábado 27 de abril en anexo 3	\$19,977,969.18	\$4,088,772.61

466. En esencia, la Demandada sostiene que, aunque las especificaciones del Contrato establecían una dosificación de hipoclorito de sodio en la tubería del inmisario que lleva agua para uso de la Central, la Demandante omitió llevar a cabo estudios para evitar el fenómeno de *biofouling*, lo que era de su responsabilidad bajo el Contrato. Señala también que la problemática de *biofouling* se pudo bien haber provocado durante las etapas de montaje y hasta antes del inicio de operación, puesto que no había entonces un agente biocida que lo evitara. En todo caso, alega que la Demandante debió haber instalado la protección catódica para la tubería marina, lo que era una medida adicional, aunque no especificada.

467. La Demandante sostiene, en cambio, que no fue su responsabilidad bajo el Contrato realizar los estudios, puesto que la CFE entregó especificaciones de dosificación de hipoclorito de sodio que la Demandante, como Contratista, debía seguir. En todo caso, arguye, era la propia Demandada quien debía haber cambiado la dosificación en las especificaciones bajo el Contrato.

468. El Tribunal ha considerado la información en el caso, y concluye que las Especificaciones presentadas en el Contrato fueron las que fueron seguidas por la Demandante. Salvo por lo que se refiere a un limitado número de temas,³⁴¹ no existía una obligación contractual de revisar todas y cada una de las Especificaciones que CFE proveyó a la Demandante al celebrar el Contrato.³⁴² De existir esa obligación bajo el Contrato, ello implicaría una enorme y onerosa labor para la Contratista, pues hubiera requerido cuestionar todas y cada una de las Especificaciones. Rehacer el análisis e ingeniería del proyecto para evaluar y juzgar toda decisión, ya fuere relevante o de detalle. El tiempo y costo de realizar dicha labor era incompatible con el desarrollo del proyecto para la construcción y puesta en marcha de la Central. Así opinó durante su presentación en la Audiencia el biólogo Harry Polman –perito de GPS y que acreditó

³⁴¹ En el Contrato se establecieron “especificaciones técnicas” relacionadas con los parámetros del suelo y topografía, las cuales *explícitamente* establecieron que se trata de un informe de carácter general que serviría como referencia técnica que habría de ser complementada, detallada y confirmada de acuerdo a los estudios que la Contratista realizase.

³⁴² Ver Anexo A-105, Especificaciones del Proyecto y Normas (Anexo 2 del Contrato).

amplia experiencia en el control de *biofouling* por 25 años— quien señaló que incluso no habría tiempo disponible para la Demandante de realizar esos estudios y completar las etapas del proyecto.³⁴³

469. Por lo tanto, en la medida en que el Contrato establecía especificaciones que la Demandante (como Contratista) debía cumplir, y no existía, en cambio, una disposición expresa que le impusiese a la Demandante la obligación de analizar, evaluar, juzgar y resolver sobre todos los temas de ingeniería y de otra naturaleza para la construcción y operación de la Central (salvo en limitadas instancias), el Tribunal concluye que no puede imponerse a la Demandante la obligación de revisarla, ni la responsabilidad derivada de la acumulación del *biofouling* en la tubería del inmisario que lleva agua al cárcamo de bombeo.
470. Las consecuencias de que la especificación fuera incorrecta, tal y como la acumulación de vida marina y la consecuente corrosión, no pueden ser impuestas a la Demandante, quien no tenía obligación legal o contractual alguna de cambiar la dosificación de cloro en el tratamiento de las tuberías.
471. Aunque la Demandada sugirió como medida preventiva la instalación de protección catódica para la tubería marina mediante ánodos de cobre,³⁴⁴ los peritos de H2O (Sr. Harry Polman y Dr. Brent Knox-Holmes) confirmaron que no resultaba viable para la tubería en cuestión, ya que sirve sólo para tubería de metal no recubierto (y la tubería estaba recubierta con material epóxico), y cualquier instalación de dichos ánodos en el exterior de la tubería (como había sido sugerido por la Demandada) no tendría efecto alguno. En la Audiencia el Dr. Knox-Holmes afirmó que : *“El sistema de protección catódica en EMPALME, no hubiera tenido ninguna influencia en el interior de las tuberías del inmisario donde se encontró la incrustación biológica.”*³⁴⁵
472. Por lo anterior, el Tribunal desecha la procedencia del Reclamo de Garantía RG-017.

³⁴³ Transcripción 16-02-2022 (1a. Parte) Final, pág.16, en donde señala que *“Durante la primera etapa de un proyecto, es muy difícil de ajustar las especificaciones de las dosificaciones de cloración, especialmente cuando son muy claras y puntuales en las especificaciones de la planta. El ajuste de estas especificaciones necesita hacerse basado en las condiciones locales específicas, tomando en cuenta las especies locales. Estos estudios requeridos, pruebas y evaluaciones tomaran meses para ser capaces de concluir que tipo de régimen de dosificación sería suficiente para prevenir el asentamiento y crecimiento de las incrustaciones biológicas en el sistema de agua de mar, en una ubicación específica. Sólo después de estos estudios, puede ser calculada la capacidad requerida del sistema de cloración para producir hipoclorito. Además, debe de ser tomado en consideración que adquirir una unidad de electrocloración lleva un largo proceso. La entrega de una unidad de electrocloración normalmente tarda doce meses, después de haber acordado las especificaciones puntuales. Todo esto significa que en la primera etapa de un proyecto no hay tiempo suficiente para hacer estos ajustes.”*

³⁴⁴ Ver informe CFE-POM27039-INCA-IN-1018 de la CFE mediante el oficio N° 7B/2019/RJMN-00450 del 22 de octubre de 2019.

³⁴⁵ Transcripción 16-02-2022 (1a. Parte) Final, págs.13-14,

Valuación de los RG's

473. En el Dictamen GPS II, esta examina la valuación de los RGs que estima se encuentran “Abiertos”.³⁴⁶ Al examinar la valuación, señala que revisó la información contenida en la Contestación a la Demandada y el cuadro resumen de valores de los RGs incluido en el Dictamen Pericial Ing. Cámara Anzures. Agrega GPS que la valuación se hizo en pesos mexicanos y en dólares americanos de acuerdo con la fecha en que la Demandada ejecutó la Carta de Crédito HSBC, es decir, el 12 de marzo de 2020.³⁴⁷ De manera detallada, incluye la información de las valoraciones de las RGs en el Apéndice GPS 12 del Dictamen GPS II.

Reclamos de Garantía “Abiertos”			
No.	Monto en MXN	Monto en USD	Observaciones GPS
19	\$3,328.00	US\$156.88	CFE no incluyó en su Memorial de Contestación un soporte de costo. Para la valuación de este RG se mantuvo la cifra de la estimación del informe inicial de GPS.
21	\$59,600.48	US\$2,809.62	El soporte de costo de cierre de este RG presentado por la CFE corresponde a la factura de Edilberto Martínez y SEPIEC S.A. de C.V. que no tienen relación con el concepto del RG. El precio de cierre incluido aquí corresponde a la cotización presentada por LOSNOGA a Empalme. ³⁴⁸
22	\$150,600.06	US\$7,099.42	El soporte de costo de cierre de este RG presentado por la CFE corresponde a la factura de Edilberto Martínez y SEPIEC S.A. de C.V. que no tienen relación con el concepto del RG. El precio de cierre incluido aquí corresponde a la cotización presentada por LOSNOGA a Empalme. ³⁴⁹

³⁴⁶ Dictamen GPS II, ¶ 237.

³⁴⁷ GPS indica que para la porción en pesos mexicanos se utiliza la tasa de conversión al 12 de marzo de 2020, al tipo de cambio de 21.2130 MXN/USD, establecido por Banco de México.

³⁴⁸ GPS señala como soporte el Anexo GPS-216, Soporte Económico RG-021.

³⁴⁹ GPS señala como soporte el Anexo GPS-217, Soporte Económico RG-022.

Reclamos de Garantía “Abiertos”			
No.	Monto en MXN	Monto en USD	Observaciones GPS
24	\$168,500.67	\$7,943.27	El soporte de costo de cierre de este RG presentado por la CFE corresponde a la factura de Edilberto Martínez y SEPIEC S.A. de C.V. que no tienen relación con el concepto del RG. El precio de cierre incluido aquí corresponde a la cotización presentada por LOSNOGA a Empalme. ³⁵⁰
82	\$222,736.13	US\$10,499.98	El soporte de costo de cierre de este RG presentado por la CFE corresponde a la factura de Edilberto Martínez y SEPIEC S.A. de C.V. que no tienen relación con el concepto del RG. El precio de cierre incluido aquí corresponde a la cotización presentada por LOSNOGA a Empalme. ³⁵¹
180	\$29,280.00	US\$1,380.29	Corresponde a un pendiente de construcción que no fue cerrado y debió ser atendido por Empalme.
181	\$29,280.00	US\$1,380.29	Corresponde a un pendiente de construcción que no fue cerrado y debió ser atendido por Empalme.
182	\$11,040.00	US\$520.44	Corresponde a un pendiente de construcción que no fue cerrado y debió ser atendido por Empalme.
183	\$11,040.00	US\$520.44	Corresponde a un pendiente de construcción que no fue cerrado y debió ser atendido por Empalme.
	\$604,765.34	US\$28,509.18	Total

474. Cabe mencionar que, de los cuatro primeros RG’s señalados en la tabla anterior, CFE ejecutó la Garantía HSBC para su atención.

³⁵⁰ GPS señala como soporte el Anexo GPS-218, Soporte Económico RG-024.

³⁵¹ GPS señala como soporte el Anexo GPS-219, Soporte Económico RG-082.

475. El perito Lorenzo José Cámara Anzures señala en su Dictamen que CFE ejecutó la Carta de Crédito HSBC para destinar recursos para la atención de los RGs arriba referidos.³⁵²
476. El Tribunal acepta la valuación propuesta por el perito GPS, debido a la ausencia de valores presentados por el perito designado por la Demandada, además de que, como puede observarse, los costos manifestados por la Demandadas en diversos casos ni siquiera corresponden al concepto del RG correspondiente, o simplemente no se justificó el costo que señaló había incurrido.
477. Resulta revelador advertir que los valores identificados por CFE para la atención de RGs (y también para los DMs) están –como lo ha identificado el perito GPS en su Dictamen- “... muy por encima de los valores de mercado o la descripción de los trabajos en los soportes suministrados por la CFE no corresponden a los requeridos para el cierre correspondiente.”³⁵³ GPS presenta en el Reporte GPS II un análisis en el que concluye lo anterior, y presenta la siguiente tabla con distintos ejemplos para evidenciarlo:

Reclamos de Garantía “Abiertos”			
No.	Naturaleza del RG	Cotización CFE	Observaciones GPS
10	Incremento en el torque del motor torna flecha de la TV al estar en 56 rpm (velocidad de torna flecha).	Cotización de Doosan Skoda por valor de \$,2857.580,24MXN	Empalme obtuvo 2 cotizaciones. El menor valor cotizado corresponde a ICISA, por \$128,664.85 MXN
20	Simulación del permisivo de apertura del bypass de baja presión (grado de sobrecalentamiento), dado que los instrumentos (TE / 11/12LBA60CT001JT01) están instalados en una ubicación incorrecta	Cotización por \$153,791.03 con el siguiente desglose: ESP-C001 por \$9,423.08 MXN ESP-C002 por \$12,266.00 MXN ESP-C005 por \$97,266.70 MXN ESP-C013 por \$10,303.26 MXN	Empalme obtuvo 2 cotizaciones. El valor menor cotizado corresponde a LOSNOGA, por \$168,500.67 MXN En todo caso, señala que las actividades señaladas en la cotización de la CFE no guardan relación con la RG

³⁵² Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001, ¶ 259.

³⁵³ Dictamen GPS II, ¶ 240

Reclamos de Garantía “Abiertos”			
No.	Naturaleza del RG	Cotización CFE	Observaciones GPS
		ESP-C017 por \$12,266.00 MXN ESP-C018 por \$12,266.00 MXN Total de \$153,791.03 MXN	
40	Cables de fuerza de las bombas de abastecimiento de agua de mar (circuito abierto) se está degradando por humedad por constante derrame de agua de sellos de dichas bombas	CFE no incluye una valuación en su Memorial de Contestación para el cierre de este RG	Empalme obtuvo 2 cotizaciones. El menor valor cotizado corresponde a In Time Control por \$133,641.31 MXN
112	Alarma y disparo del equipo dejando fuera de servicio equipo acondicionador de aceite de la turbina de vapor, no pudiendo este trabajar en forma continua y realizar la limpieza adecuada al aceite de turbina de la TV	CFE indica en su Memorial de Contestación que este trabajo fue cobrado por DOOSAN bajo el contrato 750000063, sin embargo, GPS no encontró en la información entregada por la CFE un ítem relacionado con la RG-112	Empalme obtuvo 2 cotizaciones. El valor menor cotizado corresponde a LOSNOGA, por \$59,600.48 MXN

RGs que CFE estima “Cerrados”, pero que la Demandante cuestiona la aplicación de la Carta de Crédito HSBC para cubrirlos.

478. La Demandante ha señalado diversos RGs que fueron “cerrados” por la Demandada, pero que no procedía hacerlo, como lo hizo, con cargo a los recursos provenientes de la ejecución de la Carta de Crédito HSBC. En estos casos rechaza el cobro hecho por la Demandada con cargo a la Carta de Crédito HSBC.³⁵⁴
479. Toda vez que el Tribunal ha resuelto previamente en este Laudo que la ejecución de la Carta de Crédito HSBC por la Demandada fue indebida, igualmente indebido fue haber aplicado recursos para la atención y “cierre” de los RGs que se listan a continuación,

³⁵⁴ Ver Anexo A-100.

cuando ya habían sido, entre otros: (a) “cerrados en forma automática” conforme al Procedimiento de Gestión de RGs; y (b) atendidos por la Demandante: RG-010, RG-018, RG-020, RG-032, RG-089, RG-090, RG-101, RG-102, RG-108, RG-115, RG-164, RG-165, RG-166, RG-167, RG-178, RG-179, RG-180, RG-181, RG-182, RG-183, RG-186, RG-189, RG-190, RG-192, RG-193, RG-196, RG-197, RG-198, RG-199, RG-200, RG-202, RG-203, RG-208, RG-09, RG-214, 215, RG-216, RG-220, RG-221, RG-222, RG-223, RG-224, RG-225, RG-227, RG-229, RG-230, RG-231, RG-232, RG-235, RG-236, RG-242 y RG-243.

Conclusiones

480. En atención al análisis anterior, el Tribunal concluye que, del total de los Reclamos de Garantía presentados por CFE, proceden sólo 9 (nueve), como sigue:

No.	Descripción del Reclamo de Garantía	Costo de Atención (US Dólares)
19	Intercambiadores de calor causan temperatura de aceite de control de 50 °C en TG2, mientras que en TG1 está en servicio un solo intercambiador con una temperatura de 40° C, estos equipos son para el 100 %	US\$156.88
21	Las señales de los elementos de temperatura del bypass de media presión (grado de sobrecalentamiento) están simulados	US\$2,809.62
22	Simulación recurrente que durante las maniobras de acople del tren 1 o tren 2.	US\$7,099.42
24	Se tiene que simular la temperatura del tanque de purga intermitente de los GVRC 1/2 para la apertura de la válvula de drenaje de purga intermitente.	US\$7,099.42
82	Atención a múltiples alarmas suprimidas y presente en el sistema T3000, correspondiente a las TG 1 y TG2	US\$10,499.98
180	No se cuenta con el aterrizamiento eléctrico adecuado	US\$1,380.29
181	No se cuenta con el aterrizamiento eléctrico adecuado	US\$1,380.29
182	Faltan tierras conectadas a tapas de los acoplamientos del generador eléctrico TG1	US\$520.44
183	Faltan tierras conectadas a tapas de los acoplamientos del generador eléctrico TG2	US\$520.44

No.	Descripción del Reclamo de Garantía	Costo de Atención (US Dólares)
	Total:	USD \$31,466.78

Concepto de Avance de Obra No Reconocido

Antecedentes

481. Como consta en el expediente,³⁵⁵ CFE y Empalme celebraron el 4 de marzo de 2019 el Quinto Convenio Modificatorio, mediante el cual se prorrogó la fecha de Aceptación Provisional por ciento cincuenta y ocho (158) días, debido a que, a pesar de que la Central estaba lista para la ejecución de Pruebas de Desempeño, CENACE no había autorizado su realización. Entre otros eventos:

- (a). en el mes de septiembre de 2018, CENACE informó que no autorizaba la realización de pruebas de carga por confiabilidad del sistema interconectado nacional, limitando la autorización de pruebas con carga menor de 405.4 MW Netos;
- (b). a principios del mes de octubre de 2018, tampoco autorizó la realización de pruebas al 100% de carga, limitando la autorización de pruebas con carga menores de 700 MW de capacidad;
- (c). una vez que había programado para los días 24-31 de octubre de 2018 la realización de pruebas al 100% de capacidad, la CENACE posteriormente reprogramó las fechas para los días 5-13 de noviembre de 2018;
- (d). posteriormente, el 31 de octubre de 2018 la CENACE nuevamente informó la “no autorización” atribuyendo la causa a “problemas de confiabilidad del Sistema Eléctrico Nacional”, dejando las fechas abiertas; y,³⁵⁶
- (e). a principios de noviembre de 2018 la CFE propuso a la Demandante llevar a cabo ciertas pruebas de operación a la carga que había propuesto CENACE, pero por razones no atribuibles a las Partes no fue posible realizarlo al 100% de carga.

482. No obstante dichos retrasos, la Demandante inició la Prueba de Operación el 9 de noviembre de 2018 bajo criterios autorizados por CENACE, y el 24 de noviembre

³⁵⁵ Ver antecedentes del Quinto Convenio Modificatorio.

³⁵⁶ Oficio No. CENACE/DOPS-SO-GCRNO/1283/2018.

suscribió con CFE el Acta Final de Prueba de Operación, habiendo cumplido la Central con los criterios de aceptación.

483. Sin embargo, en respuesta a una nueva petición para realizar las Pruebas el 13 de diciembre de 2018, la CENACE señaló que no se cumplían las condiciones operativas seguras para realizar las pruebas al 100% de carga que requería la Central.
484. Al suscribir el propio Quinto Convenio Modificatorio, CFE aceptó emitir el Certificado de Aceptación Provisional, pero las partes acordaron que la CFE retendría “... *la cantidad proporcional a la Obra faltante por ejecutar con corte del mes de febrero del 2019*”.³⁵⁷
485. En el mismo Quinto Convenio Modificatorio se estableció que la Demandante, como Contratista, tendría la obligación de efectuar las pruebas correspondientes al 100% de carga dentro de un plazo máximo de seis (6) meses contados a partir de la emisión del Certificado de Aceptación Provisional, siempre y cuando CENACE otorgara las condiciones requeridas.³⁵⁸

Posición de Empalme

486. Empalme sostiene en su Memorial de Demanda que CFE retuvo la cantidad correspondiente a un 99.9293% de avance de obra no reconocido con fundamento a la cláusula tercera del Quinto Convenio Modificatorio pero que, para el mes de marzo del 2019, tenían un avance mayor que ascendía al 99.9559%.³⁵⁹
487. En el Memorial de Pre-Audiencia Empalme, la Demandante señala que se deben tener por cumplidas las Pruebas Pendientes en atención a que realizó sus mejores esfuerzos sin que pudiese hacerlo por causas ajenas a la propia Demandante. Sin embargo, agregó que, en caso de que el Tribunal estimase que Empalme ha incumplido con sus obligaciones bajo el Contrato y con el Quinto Convenio Modificatorio, se le pagara la parte proporcional del monto retenido correspondiente a las Pruebas Pendientes y los conceptos que sí se realizaron.³⁶⁰
488. Finalmente, en su Memorial de Cierre, la Demandante argumenta que se acordó que la cantidad retenida debería pagarse “*al concluir las Pruebas de Desempeño y las Pruebas al 100% de Carga o al cumplirse el plazo de seis meses a partir de la firma de la*

³⁵⁷ Quinto Convenio Modificatorio, Cláusula Tercera, segundo párrafo. Ver CFE-P0M27039-C-EPCDP-CFE-0506AR, (A-107).

³⁵⁸ Quinto Convenio Modificatorio, Cláusula Tercera, cuarto párrafo.

³⁵⁹ Quinto Convenio Modificatorio, Cláusula Tercera, cuarto párrafo.

³⁶⁰ Memorial Pre-Audiencia Empalme, ¶¶ 61 y 153.

*Aceptación Provisional*³⁶¹ y, toda vez que las condiciones ya se cumplieron, la Demandada está obligada a cubrir el monto que le fue retenido.³⁶²

489. En respuesta a la manifestación de la Demandada en el sentido de que Empalme había condicionado la realización de las Pruebas de Desempeño a la ampliación de la Garantía Operativa, la Demandante sostiene que no solo no son atribuibles a la Demandante, sino que, por el contrario, los mismos son imputables a CFE, ya que ésta se negó a asumir el riesgo de pérdida de la Central cuando dicho riesgo le correspondía conforme al Contrato, además de que CFE omitió tomar en cuenta los días de preparación, duración de pruebas y avisos de programación conforme al Anexo 2 del Quinto Convenio Modificatorio y que no contaban con las condiciones para la realización de las Pruebas Pendientes y las continuas negativas por parte de CENACE tanto para realizar pruebas en fin de semana como la orden de bajar la carga, ocasionando interrupción a la secuencia de prueba.³⁶³

Posición de CFE

490. En su Contestación a la Demanda, la Demandada acepta que, según la Cláusula Tercera del Quinto Convenio Modificatorio, “*La Comisión retendrá la cantidad proporcional a la Obra faltante por ejecutar del avance reconocido con corte del mes de febrero del 2019*”.
491. Además, la Demandada expone que retuvo la cantidad de USD \$337,128.97 equivalente al 99.9293% de obra reconocida a febrero del 2019, tomando en cuenta que el monto total del Contrato asciende a USD \$476’844,369. Aceptó CFE que esta cantidad fuera pagada al concluir las Pruebas de Desempeño y las pruebas al 100% de carga o al cumplirse el plazo de 6 meses a partir de la firma del Certificado de Aceptación Provisional,³⁶⁴ pero que no se encuentra obligada a liquidar cantidad alguna del monto retenido en razón del incumplimiento de las obligaciones de la Demandante. Lo expresa así: “... *el Tribunal tiene que evaluar si la Demandante tiene derecho a recibir el pago íntegro que concluye el perito de CFE, pues finalmente no concluyó las Pruebas en el periodo de los seis meses originalmente pactados por el capricho de negarse a ejecutarlas al no contar con la Garantía Operativa que nunca estuvo sujeta a su existencia en ese periodo*”.³⁶⁵

³⁶¹ Quinto Convenio Modificatorio, Cláusula Tercera, cuarto párrafo.

³⁶² Memorial de Cierre Empalme, ¶ 18.

³⁶³ Memorial Pre-Audiencia Empalme, ¶ 59.

³⁶⁴ Contestación a la Demanda, ¶¶ 2345 y 2348.

³⁶⁵ Memorial de Cierre CFE, ¶¶ 55-56.

492. También sostiene la Demandada que Empalme señaló en su momento que la realización de las Pruebas de Desempeño y otras pruebas contractuales para la operación de la Central no podrían ser ejecutadas a menos de que CFE asumiera la responsabilidad de los riesgos al ser para entonces un inmueble sujeto el régimen de dominio de la Federación y argumentó que estas no se llevaron a cabo debido a que la Demandada “no amplió la Garantía Operativa”.³⁶⁶

Análisis del Tribunal Arbitral

493. En cuanto a la reclamación de la Demandante por concepto de obra no reconocido en la Cláusula Tercera del Quinto Convenio Modificatorio, el Tribunal define que en los términos del Quinto Convenio Modificatorio el monto acordado entre ellas fue aquél que tuviera fecha de corte del mes de febrero del 2019, misma cantidad que asciende a USD \$337,128.97 dólares.³⁶⁷
494. No existe duda en el Tribunal que las Pruebas de Desempeño y cualquier otra prueba establecida contractualmente que debían hacerse antes de la suscripción del Quinto Convenio Modificatorio, fueron motivadas por la falta de autorización por CENACE de la realización de las pruebas, por diversas razones que fueron reconocidas por las propias Partes en los antecedentes tanto del Cuarto como del Quinto Convenio Modificatorio. Las demoras no eran atribuibles a la Demandante.
495. Además, las Partes habían reconocido que la Central estaba en condiciones de generar ingresos, y por ello CFE aceptó emitir el Certificado de Aceptación Provisional.
496. Al suscribir el Quinto Convenio Modificatorio el 4 de marzo de 2019, Empalme tenía la obligación de realizar las Pruebas de Desempeño y las pruebas contractuales al 100% de carga dentro de los seis (6) meses siguientes “... siempre y cuando el CENACE otorgue las condiciones requeridas para la realización de las mismas ...”³⁶⁸ [énfasis del Tribunal].
497. Ambas Partes reconocen que las Pruebas de Desempeño fueron realizadas oportunamente y de manera satisfactoria, y en cumplimiento con los niveles establecidos en el Contrato y la normativa aplicable.³⁶⁹
498. Quedaron, sin embargo, ciertas pruebas pendientes. El Tribunal advierte que hubo varios intentos posteriores de planificación, programación y reprogramación de las

³⁶⁶ Memorial de Cierre CFE, ¶ 48.

³⁶⁷ Memorial Pre-Audiencia Empalme, ¶ 153.

³⁶⁸ Quinto Convenio Modificatorio, Cláusula Tercera, cuarto párrafo.

³⁶⁹ Memorial de Pre-Audiencia Empalme, ¶ 34 y Contestación a la Demanda, ¶ 131.

pruebas pendientes al 100% de Carga. Una fue motivada por la falta de obtención de autorización por el CENACE, otra a petición de CFE y otra más a petición de Empalme, ya que solicitaba que la Demandada asumiera responsabilidad de cualquier eventualidad, dado que la Central ya se encontraba bajo control y custodia de la CFE. Además, la propia Demandada ha reconocido que en el periodo en disputa “*no era posible asegurar condiciones tanto por autorización del CENACE para su ejecución, como asegurar la disponibilidad de combustible que habría de gestionar la Comisión.*”³⁷⁰

499. Aún y cuando la Demandada argumentó que durante los meses de junio y julio de 2019 existían las condiciones para la realización de las pruebas, el Tribunal no recibió prueba de que el CENACE o CFE hubieren estado listos para su realización. Incluso, la prueba que había sido programada para los últimos días de septiembre de 2019 fue interrumpida a media secuencia de ejecución de pruebas el día el 26 de septiembre de 2019, por instrucciones del CENACE.³⁷¹
500. En cuanto a si la ejecución de las pruebas se encontraba o no condicionada a la existencia de la Garantía Operativa, como lo alega la Demandada, el Tribunal constata que hubo incluso comunicaciones entre las Partes a principios del mes de julio de 2019 –ya estando la Central bajo el control de CFE–³⁷² en las que se evidencia que CFE estaba en efecto procurando asumir la responsabilidad para la realización de las pruebas pendientes. Las Partes también han presentado prueba de que se intentaron programar pruebas en fecha posterior, pero no se cumplieron los parámetros establecidos en el Quinto Convenio Modificatorio.³⁷³
501. Después de que el 23 de septiembre de 2019 CFE solicitó nuevos ajustes a la planificación de pruebas, Empalme confirmó a CFE que se tenían las condiciones para llevar a cabo las Pruebas Pendientes el 26 de septiembre de 2019. Ese era el último día bajo del plazo previsto en el Quinto Convenio Modificatorio para realizar las pruebas, es decir, seis (6) meses después de la emisión del Certificado de Aceptación Provisional. Sin embargo, durante el transcurso de la ejecución de las pruebas, el

³⁷⁰ Contestación a la Demanda, ¶ 102 y 105.

³⁷¹ Memorial Pre-Audiencia Empalme, ¶ 43.

³⁷² Ver oficio CFE DCIPI/CFFE/0178/2019 (Anexo A-071).

³⁷³ Ver, entre otros, los Anexos CSPPS/CCEI-1119/2019 (Anexo-078) y Anexo-101. La Cláusula Tercera del Quinto Convenio Modificatorio establece la obligación de CFE de notificar por escrito a Empalme con 30 días de antelación y confirmar al menos 21 días antes de la fecha de inicio de pruebas, para que Empalme pudiere movilizar recursos.

CENACE instruyó la baja de la carga, lo que ocasionó su interrupción, quedando pendientes varias de ellas.³⁷⁴

502. En el Dictamen Pericial Ing. Cámara Anzures, el perito considera que en el corte al mes de febrero de 2019 (que era el mes de corte según el Quinto Convenio Modificatorio) se tenía un avance de 98.5861%. El pago de la cantidad de USD \$337,105.1267 dólares (menos los costos por trabajos no reconocido) quedó sujeto a la conclusión de las Pruebas de desempeño y las pruebas al 100% de carga.³⁷⁵
503. Atento a lo anterior, el Tribunal estima que la Demandante realizó esfuerzos razonables para lograr la realización de las pruebas, cumpliendo con las Pruebas de Desempeño, pero quedando pendientes las de 100% de carga. El hecho de que no haya sido factible dicha realización, no resulta atribuible a la Demandante. En consecuencia, y de conformidad con lo dispuesto en el último párrafo de la Clausula Tercera del Quinto Convenio Modificatorio: *“Si transcurrido un periodo de seis meses, contados a partir de la emisión del Certificado de Aceptación Provisional persiste la imposibilidad de llevar a cabo las Pruebas de Desempeño y Pruebas al 100% de Carga y que este impedimento sea por causas ajenas al Contratista, este quedará liberado de la obligación de efectuarlas, considerándose que dichas pruebas han sido cumplidas a satisfacción con todos los requerimientos establecidos en el Contrato relacionados con este concepto”*.
504. Toda vez que el Certificado de Aceptación Provisional fue emitido el 26 de marzo de 2019,³⁷⁶ el Tribunal concluye que la Demandante quedó liberada de realizar las pruebas pendientes en los términos de lo pactado en el Contrato, con las consecuencias correspondientes que incluyen, entre otras, la obligación de la Demandada de entregar a la Demandante la cantidad de USD \$337,128.97 dólares, que fue retenida por CFE con motivo de la celebración del Quinto Convenio Modificatorio.³⁷⁷

³⁷⁴ Conforme al Anexo 2 del Quinto Convenio Modificatorio, para la realización de las pruebas que quedaban pendientes era necesario que la carga hubiera sido del 100% por un tiempo ininterrumpido de 5 días; de lo contrario, era imposible continuar con las mismas. Eso no ocurrió. Además, la Demandante ha sostenido que conforme a los Libros Relatorios de la Central (Anexo A-111, Libros Relatorios de fecha 7 de septiembre a 6 de octubre de 2019) después de que se ordenó la baja en la carga de la Central el 26 de septiembre de 2019, no volvió a subir, sino que siguió bajando en días posteriores, por lo que no existían las condiciones para realizar las pruebas faltantes. Ver Memorial Pre-Audiencia Empalme, ¶ 56.

³⁷⁵ Ver Contestación a la Demanda, ¶¶ 2348-2349.

³⁷⁶ Anexo A-009.

³⁷⁷ Aunque la diferencia entre la cifra pretendida por la Demandante y aquella reconocida por la Demandada asciende a apenas USD \$23.84 dólares, el Tribunal nota que la cifra correcta es la señalada por la Demandante, según consta en el Anexo A-107, Oficio CFE-P0M27039-C-EPCDP-CFE-0506 del 15 de noviembre de 2019.

Trabajos adicionales no previstos**Posición de Empalme**

505. En su Memorial de Demanda³⁷⁸ Empalme manifestó que existen trabajos adicionales o no previstos en el Contrato, que fueron realizados por ella y no le han sido pagados por la Demandada. La Demandante los agrupa de la siguiente manera:
- (a). Trabajos que obedecen a una orden de cambio (actividades que fueron ordenadas directamente por CFE), que a su vez consisten en:
 - Modo isla de la Central.
 - Implementación de la Transferencia rápida de media tensión.
 - (b). Trabajos adicionales de obras civiles.
 - Mejoramiento de suelo en la zona del equipo GVRC número 1.
 - Incremento de la longitud de las pilas para los cimientos de los equipos de la Central.
506. Respecto a los primeros, la Demandante señala que la Demandada ha aceptado el pago de la cantidad total de USD \$109,299.58 dólares, de la cual USD \$100,713.46 dólares corresponden a trabajos de implementación de transferencia rápida y USD \$8,586.12 dólares corresponden a trabajos de implementación de modo isla de la Central,³⁷⁹ por lo que estos trabajos deben considerarse aceptados y pendientes de pago.
507. Por lo que respecta a los segundos, Empalme señala en su Memorial de Demanda³⁸⁰ que respecto al mejoramiento de suelo en la zona del equipo GVRC número 1 en las bases de licitación, CFE tenía el “Estudio de Mecánica de Suelos para la Caracterización Geotécnica del Proyecto CCC Guaymas II y III (Playa Cochorit), Municipio de Empalme, en el Estado de Sonora”, fechado 9 de junio de 2014, y este estudio sólo aplicaba bajo las condiciones específicas en las que el mismo se había realizado. Sin embargo, posteriormente la Demandante presentó a CFE el Estudio de Mecánica de Suelos Rev. 2³⁸¹ en donde se argumentó que, con base en los resultados, el estudio inicial presentado por CFE no reflejaba las circunstancias reales del terreno.
508. Una postura igual adopta Empalme respecto de los costos adicionales incurridos con motivo del incremento en la longitud de pilas para las cimentaciones de los equipos del proyecto, ya que fue necesario el incremento debido al fenómeno de licuación

³⁷⁸ Memorial de Demanda, ¶ 1030.

³⁷⁹ Memorial de Cierre Empalme, ¶ 32.

³⁸⁰ Memorial de Demanda, ¶ 1044

³⁸¹ Anexo GPS 108.

presentada. Las condiciones del suelo identificadas en el estudio realizado, resultaron diferentes. Añade Empalme que CFE realizó el Estudio de Suelos proporcionado en la etapa precontractual tomando como base un emplazamiento de la Central muy distinto a la implantación final solicitada por CFE.

509. Conforme al Dictamen GPS II, la Demandante sostiene que GPS concluyó que con la realización de los estudios de suelos por parte de Empalme, identificaron que se trataba de *“condiciones de suelo diferentes, y significativamente más desfavorables para la construcción de la cimentación con relación a las de la localización original y en consecuencia generaron la necesidad de la construcción de cimentaciones que requirieron mayores obras, no previstas.”*³⁸² Tal y como lo sostuvo GPS en la Audiencia, *“[...] gran parte de los sondeos estaban desplazados hacia el sur [...] y la comisión licitó las obras con sondeos desubicados en un terreno de condiciones bastante heterogéneos.”*³⁸³
510. En respuesta a la posición de la Demandada en el sentido de que la ingeniería y los estudios entregados por la Demandada eran referencia, y era obligación de la Demandante como Contratista bajo el Contrato, realizar los estudios de suelo adicionales necesarios y el desarrollo de ingeniería, la Demandante acepta que era parte del alcance de los trabajos asignados bajo el Contrato, pero sostiene que su reclamo no comprende los costos de los estudios, sino los costos de los trabajos realizados.³⁸⁴
511. La Demandante reclama la cantidad de USD \$3,457,826.88 dólares por concepto de trabajos adicionales.³⁸⁵

Posición de CFE

512. En su Memorial de Contestación, la Demandada reconoció los trabajos relacionados con (i) la transferencia rápida de auxiliares en media tensión y (ii) la implementación de modo isla de la Central³⁸⁶.
513. Sin embargo, en cuanto al mejoramiento del suelo en la zona del equipo GVRC, la Demandada señaló que, desde que se lanzó la licitación, los requerimientos quedaron establecidos y CFE quedó desligada de responsabilidades y riesgos derivados de los mismos hasta que se iniciara su operación y lo recibiera en propiedad.³⁸⁷

³⁸² Memorial Pre-Audiencia Empalme, ¶ 156, citando el Dictamen GPS II, ¶16 (AP-002).

³⁸³ Memorial de Cierre Empalme, ¶ 52, citando la Transcripción 16-02-2022 (2a. Parte), ¶ 14.

³⁸⁴ Memorial de Cierre Empalme, ¶¶ 50-51.

³⁸⁵ Memorial Pre-Audiencia Empalme, ¶ 169, respaldado en el Dictamen GPS II.

³⁸⁶ Contestación a la Demanda, ¶ 2403.

³⁸⁷ Contestación a la Demanda, 2407.

514. Por otro lado, la Demandada argumenta que Empalme, como Contratista, conocía desde el primer momento los estudios que habían sido entregados por la Comisión y que sirvieron únicamente como referencia, dejando así la responsabilidad al Contratista para que realizara los estudios de sitio correspondientes.³⁸⁸
515. Además, CFE hace notar que, si bien la Demandante señala que el estudio geotécnico entregado a Empalme no fue realizado respecto al sitio específico en donde finalmente se construyó el proyecto, conforme a las bases de licitación se estableció que los estudios realizados por CFE a nivel de ingeniería básica eran “*de carácter general y por lo mismo sólo tiene como finalidad proporcionar a los Licitantes una referencia técnica que les facilite la preparación de su proposición*”.³⁸⁹ Es decir, dejó la responsabilidad en Empalme para la elaboración de los estudios de las cimentaciones y equipos, pues la información dada por CFE únicamente fue “referencia”.
516. En cuanto al segundo punto, el incremento de la longitud de pilas para las cimentaciones de los equipos, la Demandada argumentó que el desarrollo de los estudios geotécnicos del sitio y el desarrollo de la ingeniería de detalle de las cimentaciones, son completa responsabilidad del Contratista, por lo que no procede pago alguno por dicho concepto.
517. Además, la Demandada resalta que, de conformidad con el Dictamen Pericial Ing. Cámara Anzures, se indica que “*Acorde con las evidencias presentadas de que los estudios geotécnicos, así como el desarrollo de la Ingeniería de Detalle, la cual derivó en la determinación de la ubicación de los Equipos Principales en el Arreglo General, son obligaciones del Contratista conforme al Contrato, el suscrito considera que el reclamo presentado por el Contratista es improcedente como TRABAJOS ADICIONALES O NO PREVISTO por el contratista, por lo que en nuestra opinión la Comisión no está obligada a reconocer, ni pagar ninguna cantidad por este concepto al Contratista.*”³⁹⁰

Análisis del Tribunal Arbitral

518. El Tribunal toma nota en primer lugar que existe conformidad entre las Partes respecto a la procedencia del pago por CFE por concepto de trabajos de implementación de transferencia rápida (por un monto de USD \$100,713.46 dólares) y de trabajos de implementación de modo isla de la Central (por un monto de USD \$8,586.12 dólares).

³⁸⁸ Memorial de Contestación, ¶ 2415.

³⁸⁹ Convocatoria sección 7.1.5.

³⁹⁰ DP-001 972.

Consecuentemente, deben ser considerados como aceptados y pendientes de pago por la Demandada.

519. Respecto a los dos conceptos adicionales, el Tribunal identifica que el elemento común es que ambos se desprenden de la necesidad de realizar trabajos adicionales por la Demandante fuera del alcance original del Contrato, derivado de los estudios de suelo y el desarrollo de ingeniería que realizó la Demandante en atención a la responsabilidad contractual de analizar aquella que presentó la CFE como “referencia técnica”. El Estudio de Mecánica de Suelos Rev. 2 fue elaborado por Fuerte Ingenieros Consultores, S.A. de C.V.³⁹¹
520. La Demandante ha aceptado que los costos relacionados con los estudios de suelo y el desarrollo de ingeniería deben correr a su cargo.³⁹² No resulta necesario que el Tribunal se pronuncie por tanto sobre su procedencia.
521. Sin embargo, las pretensiones de la Demandante no se refieren al costo de dichos estudios ni el desarrollo de ingeniería, sino a los trabajos adicionales realizados, derivado de los resultados de dichos estudios.
522. No existe evidencia ni argumentación, que indique que la Demandada haya objetado los resultados de dichos estudios de suelo y desarrollo de ingeniería que derivaron en la necesidad de cambiar el sitio, ya que se detectó la presencia del fenómeno de “Licuación”, que básicamente se refiere a que los suelos que están sujetos a la acción de una fuerza o carga extrema pueden pasar de un estado sólido a uno líquido, lo que requería de implementar un mejoramiento del suelo.
523. Tomando en cuenta que los trabajos adicionales realizados no estaban incluidos dentro del alcance del Contrato, pero fueron ejecutados con base en la determinación de la Demandada del cambio de sitio, procede entonces la pretensión de la Demandante de que le sea cubierto el costo de dichos trabajos correspondientes a (a) el mejoramiento del suelo en la zona del GVRC 1, y (b) el incremento en la longitud de las pilas para la cimentación de los equipos de la Central.
524. Según se desprende del Dictamen GPS,³⁹³ los primeros fueron subcontratados por la Demandante a ifc Cimentaciones Especiales, S.A. de C.V. que se determinan en USD \$937,921.76 dólares.³⁹⁴ Al igual, para los trabajos relacionados con el incremento en la longitud de las pilas para la cimentación de los equipos, la Demandante subcontrató

³⁹¹ Anexo GPS 108. Transmital CFE-P0M27039-TR-0161

³⁹² Memorial Pre-Audiencia Empalme, ¶ 156.

³⁹³ Dictamen GPS II, ¶¶ 444.

³⁹⁴ Dictamen GPS II, ¶¶ 444-449

también a IFC Cimentaciones Especiales, S.A. de C.V., siendo el costo incurrido de USD \$2,410,605.54 dólares.³⁹⁵ En ambos casos, el perito GPS determina la razonabilidad del monto y su soporte.

525. En consecuencia, el Tribunal determina que estos costos por trabajos adicionales incurridos por la Demandante, que suman un total de USD \$3,348.527.30 dólares, deberán ser cubiertos por la Demandada.

Costos Asociados con Realización Pruebas 27 de Mayo a 26 de Septiembre 2019

Posición de Empalme

526. La Demandante sostiene que, conforme a la Cláusula Tercera del Quinto Convenio Modificatorio, la Demandada se encuentra obligada a reconocerle aquellos gastos en los que haya incurrido para la realización de las Pruebas Pendientes.³⁹⁶
527. En su Memorial de Demanda³⁹⁷ la Demandante señala que las demoras “injustificadas” en la realización de pruebas por parte de la Demandada, ocasionaron que la Demandante incurriera en diversos gastos para mantener en sitio o convocar a contratistas para la realización de las Pruebas de Desempeño inherentes a la conclusión y entrega final de la Central.
528. La Demandante asegura que entregó oportunamente la documentación “completa y suficiente” para apoyar la solicitud, pero que CFE ha rehusado el pago oportuno, por lo que reclama también el pago de los costos financieros incurridos.³⁹⁸
529. En respuesta al hecho de que el Perito Cámara Anzures no toma en consideración los costos correspondientes al periodo entre el 6 de julio y el 18 de agosto de 2019, ni aquellos relacionados con el personal técnico (denominados por las partes como “TFAs”), la Demandante argumenta que resulta “completamente inadecuado” ya que, si bien acepta que desmovilizó del Sitio de los trabajos, ello fue solo del 6 al 29 de julio de 2019, y respecto de los TFAs, sostiene que constituyen personal elemental para la realización de las Pruebas Pendientes.³⁹⁹
530. Empalme reclama un total de USD \$2,481,438.30 dólares por este concepto.⁴⁰⁰

³⁹⁵ Dictamen GPS II, ¶¶ 450-460

³⁹⁶ Memorial de Cierre Empalme, ¶¶ 41-45.

³⁹⁷ Memorial de Demanda, ¶ 1019.

³⁹⁸ Memorial de Demanda, ¶ 1028.

³⁹⁹ Memorial de Cierre Empalme, ¶ 44.

⁴⁰⁰ En su Memorial de Demanda, la Demandante reclamaba USD\$2,526,978.26.

Posición de CFE

531. En su Contestación a la Demanda, la Demandada reconoció que existió acuerdo entre las Partes en el Quinto Convenio Modificatorio en el sentido de que la CFE habría de reconocer y pagar los gastos correspondientes “razonables y documentados” en los que la Demandante incurriera en la ejecución de pruebas pendientes, realizadas por demoras no atribuibles a la Demandante.⁴⁰¹
532. Sin embargo, manifestó que *“no existe evidencia alguna que demuestre que el Contratista hubiese realizado las pruebas contractuales correspondientes, ocasionando un incumplimiento a sus obligaciones contractuales, lo cual el Contratista pretende justificar con el pretexto de que la Comisión no accedió a cubrir el costo de la vigencia de la Garantía Operativa; al respecto, se describe a continuación el orden cronológico de los hechos”*,⁴⁰² además de que aportó prueba en el sentido de que la propia Demandante informó el 21 de junio de 2019 que desmovilizaría al personal considerado para las pruebas pendientes de ejecutar.⁴⁰³
533. En su pericial, el ingeniero Cámara Anzures⁴⁰⁴ reconoce que tuvo a la vista diversos documentos que le permitieron evaluar los trabajos realizados en las pruebas pendientes durante el periodo 27 de mayo al 5 de julio de 2019, y posteriormente del 19 de agosto al 26 de septiembre de 2019, pero deja sin reconocer los cargos que pretende la Demandante correspondientes al periodo 6 de julio al 18 de agosto, en la medida en que desmovilizó al personal.⁴⁰⁵
533. Reconoce además, el ingeniero Cámara Anzures, que coincide con el Perito GPS en cuanto al mecanismo que utiliza para cuantificar los costos, ya que aplica factores de reconocimiento aplicables por periodo.⁴⁰⁶

Análisis del Tribunal Arbitral

534. El Tribunal toma nota que en el tercer y cuarto párrafos de la cláusula Tercera del Quinto Convenio se acordó lo siguiente:

“... Las Partes acuerdan que el Contratista llevará a cabo las Pruebas de Desempeño y las Pruebas contractuales pendientes al 100% de Carga y que la Comisión reconocerá y pagará los gastos correspondientes razonables y

⁴⁰¹ Contestación a la Demanda, ¶ 2380.

⁴⁰² Contestación a la Demanda, ¶ 2381.

⁴⁰³ Anexo D-763, Oficio CFE-P0M27039-C-EPCDP-CFE-0450.

⁴⁰⁴ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001, ¶ 865.

⁴⁰⁵ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001, ¶¶ 923-929

⁴⁰⁶ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001, ¶ 931.

documentados en los que el Contratista pueda incurrir en la ejecución de las citadas Pruebas, siempre y cuando no se trate de una repetición de las mismas por problemáticas asociadas al Contratista.

“Dentro de un plazo máximo de seis meses contados a partir de la emisión del Certificado de Aceptación Provisional, el Contratista tendrá la obligación de efectuar las correspondientes Pruebas de Desempeño y las pruebas contractuales al 100% de Carga, siempre y cuando el CENACE otorgue las condiciones requeridas para las mismas, aplicándose lo establecido en el Anexo 13 del Contrato, debiéndose considerar la correspondiente degradación de los turbogeneradores, para validar los Valores Garantizado”

535. La Demandante estuvo lista para llevar a cabo la realización de las pruebas pero, como ha quedado ya acreditado en este procedimiento arbitral, a pesar de que la Demandante estuvo dispuesta a realizar las Pruebas de Desempeño, las demoras fueron causadas por el CENACE en señalar las fechas o en posponerlas, y por lo tanto la demora no resulta atribuible a la Demandante, quien estuvo dispuesta a realizarlas e incluso incurrió en costos directos, indirectos, materiales, consumibles y servicios para tal efecto.
536. No obstante, el Tribunal toma nota de que, en efecto, durante el periodo comprendido del 6 de julio al 18 de agosto de 2019 la Demandante “desmovilizó” a su personal y recursos, por lo que no resultaba viable durante dicho periodo llevar a cabo las pruebas.
537. El Tribunal acepta el desglose presentado por el Perito Cámara Anzures⁴⁰⁷ para determinar el cálculo de dichos costos incurridos.

Concepto	Relación de Costos por Período (USD Dólares)				
	27 Mayo al 5 de junio	6 de julio al 18 de agosto	19 de agosto al 26 septiembre	Monto Parcial	Anexo ⁴⁰⁸
Costo Directo	\$326,435.53	\$ 0.00	\$156,264.69	\$482,700.22	Anexo 142 Soporte Costos Directos
Costo Indirecto	\$248,113.45	\$ 0.00	\$241,678.81	\$489,792.26	Anexo I 43 Soporte Costos Indirectos
Materiales Consumibles	\$155,422.96	\$ 0.00	\$ 0.00	\$155,422.96	Anexo 144 Soporte Materiales y Consumibles
Servicios	\$ 0.00	\$ 0.00	\$86,937.01	\$86,937.01	Anexo 145 Soporte Servicios

⁴⁰⁷ Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001, ¶ 932.

⁴⁰⁸ Corresponden a anexos del Dictamen Pericial Ing. Cámara Anzures, Anexo DP-001.

TFA's	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	Anexo 145A Soporte TFA's
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538. En consecuencia, el Tribunal determina que estos costos asociados con la realización de Pruebas incurridos por la Demandante por un total de USD\$1,214,852.45 dólares, deberán ser cubiertos por la Demandada.

Gastos y costos derivados de Acuerdo 16 de enero 2019, sobre aplicación de Cláusula 25.5 del Contrato.

Antecedentes

539. La Cláusula 25.5 del Contrato establece que, si la “Fecha Programada de Aceptación Provisional” –como dicho quedó definido en el Contrato– se retrasara por un periodo mayor a sesenta (60) días debido a un caso de “Fuerza Mayor Gubernamental” o supuestos de [caso fortuito] identificados en la Cláusula 12.3(b) del Contrato, el Contrato se daría por terminado en forma automática, salvo que las Partes llegasen a un acuerdo sobre términos y condiciones que *“razonablemente compensarán al Contratista los gastos directamente relacionados con las Obras, razonables y documentados en los que el Contratista pueda incurrir (mismos que incluirán el servicio de la Deuda del Contratista en relación a los Acuerdos Financieros y cualquier financiamiento similar proporcionado por cualquiera de los Participantes o cualquiera de sus Filiales) como consecuencia de cualquier retraso ...”*
540. Habida cuenta de los retrasos en la Fecha Programada de Aceptación Provisional que fue reconocida por las Partes como consecuencia –básicamente– de la omisión del CENACE de autorizar ciertos actos necesarios para la realización de las Pruebas de Desempeño y otras Pruebas con carga al 100%,⁴⁰⁹ las Partes suscribieron el 16 de enero de 2019 el Acuerdo entre las Partes Sobre la Aplicación de la Cláusula 25.5 para Cumplir el Objeto del Contrato PIF-017/2015 (el “Acuerdo 25.5”),⁴¹⁰ en el que establecieron las bases para determinar el importe procedente a compensar a la Demandante. Dichos conceptos incluyen los siguientes rubros: (i) financieros, seguros y garantía, (ii) gastos por la gestión de personal y de administración de oficinas locales de campo, (iii) reclamaciones de terceros, y (iv) ampliación de garantías de los equipos y/o instalaciones.
541. La Demandante reconoce que la Demandada ya cubrió los costos financieros, seguros y garantía,⁴¹¹ y las Partes han logrado un acuerdo respecto a los gastos por la gestión

⁴⁰⁹ En las Declaraciones del Acuerdo 25.5 se relacionan los retrasos reconocidos por las Partes.

⁴¹⁰ Anexo A-007.

⁴¹¹ Memorial de Demanda, ¶ 997.

de personal y de administración de oficinas locales de campo por USD \$6,950,822.24 dólares.⁴¹² Añade que entregó incluso a CFE una nota de crédito por retención de 5 al millar del valor de la factura correspondiente a la retención de ejecución de obra pública.⁴¹³

Posición de CFE

542. En su Memorial de Contestación, la Demandada reconoció⁴¹⁴ que existe un acuerdo entre las Partes para que CFE cubra a la Demandante la cantidad de USD \$6,950,822.24 dólares por concepto de gestión de personal y de administración de oficinas locales de campo, derivado del Acuerdo 25.5, Apartado 3.2, más sus costos financieros a la tasa de gastos financieros por un monto de USD \$163,861.91 dólares.⁴¹⁵
543. Sin embargo, la Demandada cuestiona la procedencia de las reclamaciones de terceros. Señala que, después de que las Partes se reunieron a fines del mes de enero de 2020, y la Demandante le entregó información sobre este rubro, la CFE emitió observaciones y se identificó información faltante de soportes de las facturas reclamadas, que no hacían posible determinar la procedencia de los gastos reclamados.⁴¹⁶
544. Respecto de la manifestación de la Demandante en el sentido de que, una vez que ésta le entregó la información, la Demandada “guardó silencio”, la Demandada indica en su Contestación a la Demanda que la Comisión decidió “sujetarse a lo que resultara del Procedimiento Arbitral, y exponer la razonabilidad de lo entregado por el Contratista en cada uno de sus reclamos, para establecer la procedencia del monto, ya que la Demandante pretende que con la simple presentación de facturas para soportar el monto reclamado, sean cubiertas en su totalidad, sin analizar una razonabilidad y procedencia del mismo”.⁴¹⁷
545. Sostiene la Demandada que los reclamos de terceros presentados reflejan actividades realizadas que no corresponden a actividades propias de la Obra y que forman parte del alcance del Contrato, según consta en las notas de bitácora de obra, esto con relación al avance aportado en las cédulas mensuales conciliadas entre ambas Partes, y por tal motivo no reúne los requisitos establecidos en el Acuerdo 25.5.⁴¹⁸ Agrega CFE que la Demandante no acredita que los gastos reclamados sean producto de una reclamación

⁴¹² La Demandante agrega que incluso envió la factura en Comunicación CFE-P0M27039-C-EPCDP-CFE-0573 de fecha 9 de julio de 2020 (Anexo A-032)

⁴¹³ Memorial Pre-Audiencia Empalme, ¶ 144.

⁴¹⁴ Contestación a la Demanda, ¶ 2354.

⁴¹⁵ Contestación a la Demanda, ¶ 2452 (Las cantidades están sujetas a actualización).

⁴¹⁶ Contestación a la Demanda, ¶¶ 2358-2361.

⁴¹⁷ Contestación a la Demanda, ¶ 2364.

⁴¹⁸ Contestación a la Demanda, ¶ 2366.

de suministradores o subcontratistas, ni se entregaron las evidencias documentales que permitieran demostrar que los costos reclamados se deban a una afectación motivada por las prórrogas de la Fecha Programada de Aceptación Provisional.⁴¹⁹

546. La Demandada muestra una tabla de avances del proyecto conciliados con el contratista mes a mes⁴²⁰ en la que señala que, en el mes de marzo-abril de 2018, Empalme logró el avance del 35% establecido en el Contrato PIF-017/2015 por los trabajos de la Etapa de Construcción, que equivale al 100% de esta etapa y trabajaba en la atención de pendientes de construcción durante este periodo. Igualmente, señala que *”... de la misma tabla se observa que el valor de la etapa de Puesta en Servicio equivalía al 5% del valor de actividades del Contrato y que, al corte a febrero de 2018, la Contratista tenía un avance del 80.695% o bien el 4.0384% del Proyecto por los trabajos de PEM., teniendo que desde el corte de febrero y hasta el corte de agosto de 2018, el Contratista alcanzó un avance del 96.6604% de PEM, que equivale al 4.8330% del Proyecto, o sea 0.7982%, por las actividades desarrolladas desde el mes de marzo de 2018 hasta el mes de agosto de 2018, periodo que contempla el plazo de análisis”*,⁴²¹ y concluye que las pretensiones de la Demandante se encuentran en el monto del Precio del Contrato.
547. En su Memorial de Cierre, la Demandada confirma que la Demandante no demostró en el procedimiento ningún reclamo de terceros o de subcontratistas en el periodo pactado en el Acuerdo 25.5, por lo que *“... no cumple con los atributos de este en relación con la cláusula 25.5, que es el reembolso de gastos erogados y documentados, de ahí que el monto pretendido por USD 2’841,941.71, resulte improcedente”*.⁴²²

Posición de Empalme

548. La Demandante menciona que sostuvo reuniones con CFE en el mes de enero de 2020 con el fin de revisar y conciliar los costos, y que posteriormente envió a CFE la documentación de soporte, pero que la Demandada no se ha pronunciado a la fecha al respecto.⁴²³ El monto reclamado por Empalme asciende a USD \$2,841,941.71 dólares.
549. Empalme sostiene que estos gastos tienen sustento en la Cláusula 3.3 del Acuerdo 25.5, ya que, conforme al Contrato, el propósito sería remunerar a Empalme por los retrasos en la Fecha Programada de Aceptación Provisional de la Central. Por lo tanto, el Acuerdo 25.5 contiene los términos y condiciones en que esta remuneración se debería

⁴¹⁹ Contestación a la Demanda, ¶ 2370.

⁴²⁰ Contestación a la Demanda, ¶ 2370.

⁴²¹ Contestación a la Demanda, ¶ 2375.

⁴²² Memorial de Cierre CFE, ¶¶ 85-86, en donde afirma que esto fue confirmado por la testigo Elena Oropeza, Transcripción del 16-02-2022, Segunda parte, pag. 24.

⁴²³ Memorial de Demanda, ¶¶ 1011-1014.

realizar. En particular, se debe remunerar a Empalme siempre que los gastos correspondieran al periodo comprendido entre el 8 de marzo de 2018 y el 24 de agosto de 2018.⁴²⁴

550. Por otra parte, Empalme rechaza la argumentación de CFE en el sentido de que, lo que pretende Empalme, es que se le reembolsen gastos derivados de las prórrogas a la Fecha Programada de Aceptación Provisional y que en el periodo reconocido y conciliado bajo el Quinto Convenio Modificatorio no había posibilidad alguna de reclamos a terceros.⁴²⁵ Es decir, que los reclamos a terceros se presentaron fuera de tiempo distinto al previsto. Al respecto, sostiene que GPS ha concluido en su segundo Reporte que “... *el periodo que se estableció en el Acuerdo de Aplicación de la Cláusula 25.5 resulta de la matemática cronológica que se llevaba en los acuerdos modificatorios previos teniendo en cuenta los impactos no atribuibles a EMPALME que es lo que se reconoció en dichos acuerdos. Por tanto, los 170 días de afectación que fueron fijados entre las fechas del 8 de marzo 2018 al 24 de agosto de 2018 corresponden a aquellos impactos establecidos en el Cuarto Convenio Modificatorio (12 días), y Quinto Convenio Modificatorio (158 días), ...*”.⁴²⁶

551. Además, la Demandante sostiene que ha quedado probado⁴²⁷ que la gran mayoría los eventos de fuerza mayor y las consecuentes improductividades y pérdida de tiempo que le causaron a Empalme los eventos que provocaron la no realización de las pruebas oportunamente “*no sucedieron dentro el periodo de reconocimiento establecido en el Acuerdo...*” como ha opinado GPS en su Reporte GPS II, pero que, no obstante, sí se cumple el objetivo del Acuerdo 25.5, el cual es compensar a Empalme por los gastos derivados de tal retraso, el cual es, por demás, imputable a CFE.⁴²⁸ Es decir, a pesar de que las afectaciones a terceros que se relacionaron con dichos eventos sucedieron después del 23 de agosto de 2018, lo cierto es que, mediante el reconocimiento de los gastos incurridos por la Demandante entre el 8 de marzo y el 24 de agosto de 2018, “... *sí se cumple con el objeto y fin del Acuerdo 25.5, pues se cumple con los términos pactados por las Partes para compensar a Empalme por los gastos en los que incurrió por virtud de los retrasos ...*”.⁴²⁹

552. En efecto, sostiene Empalme, CFE sabía desde la suscripción del Acuerdo 25.5 que, por lo menos, una parte del periodo de reconocimiento coincidiría con la etapa de puesta en marcha de la Central, pues se pactó en dicho Acuerdo que el periodo iniciaría

⁴²⁴ Memorial de Cierre Empalme, ¶ 35.

⁴²⁵ Memorial Pre-Audiencia Empalme, ¶ 150.

⁴²⁶ Dictamen GPS II, ¶¶ 186-195 (Anexo AP-002)

⁴²⁷ Memorial de Cierre Empalme, ¶ 37.

⁴²⁸ Dictamen GPS II, ¶¶ 188-196 (AP-002).

⁴²⁹ Memorial de Cierre Empalme, ¶ 37, Memorial Pre-Audiencia Empalme, ¶ 152.

el 8 de marzo de 2018. Sin embargo, no fue hasta este procedimiento arbitral que CFE pretendió desconocer los términos de remuneración pactados en el Acuerdo 25.5.

553. La Demandante argumenta que “... lo que pretende alegar CFE como impedimento para reembolsarlo es un absurdo”⁴³⁰, y que “es ilógico que CFE pretenda desconocer los gastos incurridos por Empalme dentro del mencionado periodo cuando ésta: (i) ha reconocido y pagado los gastos incurridos en dicho periodo correspondientes a la Cláusula 3.1 (Financieros); y (ii) ha reconocido, tanto mediante el Acuerdo del 7 de Julio de 2020 como en este Arbitraje, la procedencia del reembolso de los gastos incurridos en dicho periodo correspondientes a la Cláusula 3.2 (Gastos por la Gestión de Personal y de Administración de Oficinas Locales y de Campo)”.⁴³¹
554. Concluye Empalme que, atender los argumentos presentados por CFE y desconocer su reclamo bajo la Cláusula 3.3 del Acuerdo 25.5, “iría en contra del objetivo del mismo Acuerdo y de la Cláusula 25.5 del Contrato, pues dejaría sin efectos el pacto alcanzado por las Partes”⁴³² y a Empalme sin oportunidad de recibir remuneración alguna por los costos que indebidamente tuvo que soportar por los retrasos en la Fecha Programada de Aceptación Provisional.
555. En respuesta a la posición de CFE en el sentido de que los reclamos de terceros no cumplen con los requisitos establecidos bajo el Acuerdo 25.5, la Demandante sostiene que, si bien es cierto que la Demandada hizo ciertos requerimientos de información, estos fueron oportunamente satisfechos.⁴³³

Análisis del Tribunal Arbitral

556. El conflicto radica en si los pagos que la Demandante sostiene que ha cubierto a terceros relacionados con los trabajos, son procedentes. El numeral 3.3 del Acuerdo 25.5 (Reclamaciones de Terceros) establece que se incluyen las “*reclamaciones de suministradores y subcontratistas recibidas ... debido a la prórroga de la Fecha Programada de Aceptación Provisional y/o motivo que dio origen a esta afectación según lo descrito en el presente Acuerdo*” y expresamente señala que “... *EL CONTRATISTA deberá presentar toda la información contractual, contable y toda aquella que se requiera para el análisis y procedencia de los conceptos y montos reclamados por terceros*”.

⁴³⁰ Memorial Pre-Audiencia Empalme, ¶ 151.

⁴³¹ Memorial de Cierre Empalme, ¶ 38.

⁴³² Memorial de Cierre Empalme, ¶ 39.

⁴³³ Memorial Pre-Audiencia Empalme, ¶¶ 148-149.

557. Al igual que para el reembolso de otros conceptos, dicho numeral 3.3 señala que deberá presentarse “... *toda la información contractual, contable y toda aquella que se requiera para el análisis y procedencia de los conceptos y montos reclamados ...*”, y la Cláusula 4 (Lineamientos) del Acuerdo 25.5 contempla los criterios que deben ser cumplidos para la procedencia de cualquier reclamo.
558. El Tribunal toma nota que, derivado del Acuerdo 25.5, numeral 3.2, existe un reconocimiento de la Demandada en cuanto a la obligación de CFE de cubrir a la Demandante cantidad de USD \$6,950,822.24 dólares por concepto de gestión de personal y de administración de oficinas locales de campo más sus costos financieros a la tasa de gastos financieros por un monto de USD \$163,861.91 dólares.
559. Aún y cuando el Tribunal está consciente de que la Demandada ha aceptado cubrir el monto antes señalado por concepto de gestión de personal y administración de oficinas de campo, y que la Demandante ha argumentado que no aceptar el mismo trato para los “reclamos de terceros” implica que iría en contra del objetivo mismo del Acuerdo 25.5, y que incluso se deja sin oportunidad de recibir remuneración alguna por los costos que tuvo que soportar por los retrasos en la Fecha Programada de Aceptación Provisional, el reclamo está basado en una norma contractual voluntariamente aceptada por la propia Demandante que dispone el periodo de cobertura.
560. No se trata de un reclamo en base a una responsabilidad extracontractual, sino que deriva de un acuerdo expreso en las Partes. Siendo así, el Tribunal no encuentra justificación para resolver en la forma que solicita la Demandante, a pesar de que la Demandada haya reconocido ya otros conceptos durante el período. Por lo tanto, el Tribunal rechaza la pretensión de la Demandante por USD \$2,841,941.71 dólares.

Aceptación Final de la Planta y suscripción del Finiquito.

Antecedentes

561. La aceptación final de las obras quedó establecida en la Cláusula 18 del Contrato, bajo el apartado 18.6 con subtítulo “Aceptación Final”, en la que se acordó que la Comisión quedaba obligada a expedir en favor del Contratista un Certificado de la Aceptación Final de la Central, siempre y cuando el Contratista presentara a la Comisión:
- “a) *el finiquito de garantías por escrito relacionado con la Central a que se hace referencia en la cláusula 20.10.*
 - b) *a solicitud de la Comisión, cualquier otra información que establezca el pago o la satisfacción de las obligaciones tales como recibos, finiquitos o*

cancelación de Gravámenes, derivados del contrato en la medida y en la forma en que la comisión hubiese señalado.

- c) *evidencia de que el contratista ha realizado todas las correcciones o sustituciones indicadas por la comisión conforme a la cláusula 18.4 anterior,*
- d) *evidencia de que ha concluido el periodo de garantía, y que el contratista ha prestado satisfactoriamente la garantía de la central y*
- e) *8 (ocho) copias impresas y 1 (una) copia electrónica en formato CD-ROM. del libro final de Documentos de acuerdo al Anexo 5. Si, habiendo satisfecho las condiciones establecidas en esta Cláusula, el certificado de aceptación final no es emitido por la comisión, el contratista podrá exigir por escrito que ésta emita el certificado de aceptación final y si la comisión no lo hace dentro de 15 (quince) Días siguientes a la recepción de dicha solicitud se entenderá que el Certificado de Aceptación Final ha sido emitido para todos los efectos legales en caso de presentarse una disputa se estará a lo establecido por la cláusula 8.”*

Posición de Empalme

- 562. La Demandante manifestó su postura ante el Tribunal Arbitral, pidiendo que se declare la Aceptación Final de la Planta y como consecuencia se ordene suscribir el finiquito del Contrato “*de conformidad con la Ley de Obras Públicas y Servicios Relacionados con las Mismas, así como su Reglamento*” debido a la emisión del Certificado de Aceptación Provisional.⁴³⁴
- 563. Empalme ha pedido al Tribunal la bifurcación del procedimiento arbitral, “... *a fin de evitar que éstas [las Partes] tengan que iniciar procedimientos arbitrales distintos con las implicaciones económicas y temporales que esto conlleva*”.⁴³⁵
- 564. En su Memorial Pre-Audiencia, la Demandante expresa que en el momento en que CFE emitió el Certificado de Aceptación Provisional la Demandante manifestó que “*en virtud de que se [finalizó] con todos los trabajos relacionados con el proyecto en comento y de conformidad con las especificaciones contractuales así como todas las obras necesarias para el adecuado funcionamiento de los equipos críticos*” y que “*el cuidado, la custodia y el control de la Central, así como el riesgo de pérdida de la misma [fueron] transferidos a la Comisión*”.⁴³⁶

⁴³⁴ Memorial de Demanda, ¶ 1067.]

⁴³⁵ Memorial de Demanda, ¶ 1069.

⁴³⁶ Memorial Pre-Audiencia Empalme, ¶ 163.

565. Con posterioridad, la Demandante fundamenta su dicho en el artículo 64, segundo párrafo de la Ley De Obras Públicas y Servicios Relacionados con las Mismas, la cual enuncia que: “...*Recibidos físicamente los trabajos, las partes dentro del término estipulado en el contrato, el cual no podrá exceder de sesenta días naturales a partir de la recepción de los trabajos, deberán elaborar el finiquito de los mismos, en el que se hará constar los créditos a favor y en contra que resulten para cada uno de ellos, describiendo el concepto general que les dio origen y el saldo resultante.*”⁴³⁷

566. Posteriormente, en su Memorial de Cierre, Empalme:⁴³⁸

- Pide la liquidación del Contrato, la suscripción del finiquito y la aceptación final de la Central.
- Busca la bifurcación del procedimiento para celebrar el finiquito del Contrato.
- Expresa que ha probado todos los elementos para que se lleva a cabo la liquidación del Contrato, pues el avance con el que cuentan este más del 99%.
- Pide que en caso de que alguna DM se encuentra abierta, está no necesitaría de atención porque se utilizarían los montos que Empalme entregó.

Posición de CFE

567. La Demandada expresó la improcedencia de la Aceptación Final aduciendo que no se concluyeron los requisitos de la Cláusula 18.4 del Contrato, pues la Demandante no había realizado las correcciones indicadas por la Comisión pues existen DM's y RG's que se encuentran abiertos, existiendo incluso pendientes no atendidos por causas imputables a la Demandante.⁴³⁹

568. Con base en lo anteriormente expresado, la Demandada concluye que, al no cumplirse las obligaciones asumidas por la Demandante, no se puede suscribir el finiquito pues no se cumplen con los requisitos establecidos en la Ley de Obras Públicas y Servicios Relacionados con las Mismas y su Reglamento.⁴⁴⁰

569. La Demandada expresó su inconformidad con la solicitud de una bifurcación debido a que el presente arbitraje abarca todas las acciones y no existe algún otro reclamo diverso por el cual se podría realizar una bifurcación. Además de que la Demandante no ha expresado la razón por la cual esta bifurcación reduciría el tiempo y los costos de la controversia.

⁴³⁷ Ley de Obras Públicas y Servicios Relacionados con las Mismas, artículo 64.

⁴³⁸ Memorial de Cierre Empalme, ¶¶ 109 y 110. Memorial de Cierre Empalme, ¶

⁴³⁹ Contestación a la Demanda, ¶ 2435.

⁴⁴⁰ Contestación a la Demanda, ¶ 2437.

570. CFE, en su Memorial de Cierre, declara que el Tribunal no es competente para pronunciarse sobre el finiquito porque se trata de un acto que deriva de: (i) una Terminación Anticipada del Contrato, o bien, (ii) la rescisión del Contrato, ya que la Demandante nunca solicitó una acción en ese sentido, toda vez que “... *la Ley aplicable al Contrato establece específicamente en el artículo 98, que no son arbitrables.*”⁴⁴¹

Análisis del Tribunal Arbitral

571. Respecto a la Aceptación Final, el Tribunal resuelve que, en la Cláusula 18, apartado 18.6 del Contrato, quedó establecido que la Comisión deberá expedir a favor del Contratista un Certificado de Aceptación final, siempre y cuando se cumplieran con todos y cada uno de los requisitos que fueron señalados en el Contrato.
572. Con fundamento en lo anterior, el Tribunal ha hecho notar que la Contratista no ha concluido satisfactoriamente con todas las correcciones de la Central, y han quedado pendientes algunas cuyo costo debe ser cubierto por la propia Contratista conforme a lo analizado previamente en este Laudo. Sin perjuicio de lo anterior, el Tribunal no puede dejar de advertir que las propias Partes reconocieron desde la suscripción del Quinto Convenio Modificatorio que, para el mes de marzo del 2019, la Contratista había logrado un avance que ascendía al 99.9559%⁴⁴² de la Obra, y la Comisión ha reconocido que desde entonces la Central generaba energía eléctrica y se encontraba en condiciones de generar ingresos. Por ello, el Tribunal estima que las obligaciones actuales de la Demandante son esencialmente de pago, derivadas de la existencia de Deficiencias Menores o Reclamos de Garantía pendientes que han sido previamente analizados en este Laudo.
573. Ahora bien, el Tribunal nota igualmente que las cantidades a cargo de la Demandante por dichos conceptos resultan muy inferiores a la luz de las cantidades que resultan a cargo de la Demandada conforme al análisis y conclusiones logradas previamente en este Laudo, y que las cantidades a cargo de la Demandante pueden compensarse con aquéllas adeudadas por la Demandada. Por lo tanto, una vez que este Laudo sea definitivo, procede que CFE entregue a la Demandante el Certificado de Entrega Final.
574. El Tribunal no puede expresarse acerca del cumplimiento del finiquito como pide la Demandante en su Memorial de Conclusiones,⁴⁴³ pues no se encuentra facultado en razón de la legislación aplicable a la presente materia para decretar la celebración de un finiquito entre las Partes. Aun y cuando las partes sometieron diversos puntos en

⁴⁴¹ Memorial de Cierre CFE, ¶ 1.

⁴⁴² Quinto Convenio Modificatorio, Cláusula Tercera, cuarto párrafo.

⁴⁴³ Memorial de Cierre Empalme, ¶¶ 106-116.

conflicto a la decisión del Tribunal, para este Tribunal resulta incierto si han quedado satisfechas todas las obligaciones a cargo de las Partes, de manera que permitiere suscribir un finiquito que libere a ambas Partes de sus respectivas obligaciones bajo el Contrato. No ha sido misión del Tribunal cerciorarse de dicho cumplimiento, y por lo tanto el finiquito deberá de ser suscrito por ambas Partes una vez que las obligaciones a su cargo hayan quedado plenamente satisfechas, o las Partes hagan concesiones recíprocas que permitan suscribirlo.

575. Por otra parte, el Tribunal considera improcedente la petición de bifurcación del procedimiento, pues, además de que Empalme no demostró la utilidad que una bifurcación tendría en el procedimiento, el presente Laudo resuelve de manera completa y definitiva los puntos controvertidos que le han sido sometidos para su decisión, incluyendo, pero si estar limitado, a los montos y pagos demandados por las Partes.

Gastos financieros / intereses

Antecedentes

576. La Cláusula 10 del Contrato (Pago) establece en su inciso 10.1 (Forma de Pago) lo siguiente:

***“10.1 Forma de Pago.** A más tardar a las 12:00 P.M., hora de la ciudad de Nueva York, estado de Nueva York, en la fecha en que el Precio del Contrato o, de ser aplicable, el Valor de Terminación, se haga exigible, la Comisión pagará al Contratista, sin deducción (excepto por la que se refiere en esta Cláusula 10 o por los impuestos que deban ser retenidos de acuerdo con las Leyes Aplicables), el Precio del Contrato o el Valor de Terminación aplicable, según sea el caso, en Dólares, mediante transferencia bancaria electrónica ...”.*

577. En la especie, tratándose de las cuestiones materia de la controversia el pago a cargo de la Demandada corresponde en cada caso a una parte del Precio del Contrato, o a otros conceptos, y no a Valor de Terminación; y los Gastos Financieros pagaderos como consecuencia del impago, están regulados por la Cláusula 10.2 del Contrato como sigue:

***“10.2 Gastos Financieros.** En caso de que cualquier parte del Precio del Contrato, cualquier Valor de Terminación o cualquiera otra cantidad pagadera de conformidad con el presente Contrato, no sea pagada una vez vencida, a solicitud del Contratista o de la Comisión, según sea el caso, la Comisión o el Contratista según corresponda, deberá pagar gastos financieros a la Tasa de Gastos Financieros, dichos gastos empezarán a generarse cuando las Partes tengan*

definido el importe a pagar, los cuales se calcularán sobre las cantidades no pagadas, debiéndose computar por Días desde que sean determinadas hasta la fecha en que se ponga (sic) las cantidades a disposición del Contratista o de la Comisión, según sea el caso ...” [Énfasis añadido por el Tribunal]

578. En relación con la cláusula que antecede, de conformidad con las definiciones contenidas en la Cláusula 1.1 del Contrato, Día “*significa 1 (un) Día natural o calendario*”; y, por lo que respecta a la Tasa de Gastos Financieros:

“Tasa de Gastos Financieros” significa (a) con respecto a importes en Pesos. Una tasa igual a la establecida en la Ley de Ingresos de la Federación en los casos de prórroga para el pago de créditos fiscales, conforme se establece en el artículo 55 de la LOPSRM, y (b) con respecto a importes en Dólares, el costo promedio ponderado de la deuda en Dólares que prevalezca en dicho momento, de conformidad con los Acuerdos Financieros (pero excluyendo cualquier interés moratorio o por incumplimiento), más 1% (un punto porcentual), tal como se establece en el certificado emitido por los auditores externos del Contratista quien proporcionará dicho certificado a la Comisión a más tardar a los 90 (noventa) Días posteriores a la firma del Contrato. En caso de que dicho certificado no hubiera sido proporcionado a la Comisión por el Contratista, se aplicará en sustitución de la Tasa indicada en el inciso b), la tasa que resulte del promedio aritmético de las tasa LIBOR (London Interbank Offered Rate) a 6 (seis) Meses al cierre de cada Día, del período comprendido desde el Día en que se tenga la obligación de realizar el pago correspondiente, hasta 2 (dos) Días inmediatos anteriores a la fecha en que se haga efectivo dicho pago, de acuerdo con la cotización de Reuters Services, más 1% (un punto porcentual). ...” [Énfasis añadido por el Tribunal]

579. Finalmente, para determinar la Tasa de Gastos Financieros, definida como arriba se define, se debe considerar que:

“Acuerdos Financieros” significa todos los contratos, pagarés, contratos de garantía, hipotecas y otros documentos relacionados con el financiamiento de las Obras, incluyendo cualquier modificación, extensión, renovación, refinanciamiento y reemplazo de los mismos, pero excluyendo aquellos relacionados con financiamientos otorgados por cualquiera de los Participantes o cualquiera de sus Filiales”.

Posición de Empalme

580. La posición de Empalme al respecto es escueta y se reduce a manifestar que “*En adición a lo expuesto en este memorial, [el Memorial de Demanda] se solicita a los miembros del Tribunal para que, respecto de cada una de las condenas de pago que se impongan a CFE, se considere lo dispuesto en la cláusula 10.2 del Contrato, en el*

que se establece la base para cuantificar los Costos Financieros que generará cualquier suma que no se liquide en tiempo...”⁴⁴⁴, “Condene a CFE al pago de Costos Financieros cuando resulte aplicable”⁴⁴⁵ y “ ... reitera que sobre cada condena de pago que se imponga a CFE correspondiente a los gastos y costas, deberán pagarse los gastos financieros calculados de conformidad con lo dispuesto en la Cláusula 10.2 del Contrato [que cita como nota de pie de página, con otras referencias]. La procedencia de la aplicación de los gastos financieros no es discutida por CFE sino que, por el contrario, fue reconocida por el Ing. Cámara durante la Audiencia”.⁴⁴⁶

Posición de CFE

581. La posición de CFE en relación con los Gastos Financieros es aún más escueta toda vez que en su extensa Contestación a la Demanda niega todas las pretensiones de pago formuladas por Empalme y en consecuencia no hace alguna alusión directa a Gastos Financieros y, entre otras pretensiones, se limita a solicitar genéricamente al Tribunal Arbitral que “*Deseche la pretensión de condenar a CFE al pago de las prestaciones que ha presentado la Demandante por ser improcedentes y que eventualmente [se] desprendan de los memoriales presentados durante el procedimiento arbitral por no realizarlo en el momento en que se ha fijado la Litis*”⁴⁴⁷. CFE procede de igual manera en su Memorial Pre-Audiencia⁴⁴⁸ y en su escrito Memorial de Cierre es igualmente omisa en controvertir las pretensiones planteadas por la Demandante en el rubro de Gastos Financieros y se limita a pedir que “*Se desechen las pretensiones de la Demandante diferentes a la que la Comisión ha aceptado su pago*”.⁴⁴⁹

Análisis del Tribunal Arbitral

582. A la luz de todo lo anterior, y toda vez que no existe controversia en torno a la procedencia del cobro de Gastos Financieros cuando una cantidad adeudada se encuentra vencida y no ha sido pagada, cabe concluir que (1) es procedente el pago de Gastos Financieros en el caso de aquellas cantidades respecto a las cuales *la Comisión ha aceptado su pago*⁴⁵⁰; y (2) es asimismo procedente el pago de Gastos Financieros en el caso de aquellas cantidades respecto a las cuales, habiendo sido cuestionada la pretensión de Empalme por CFE, el Tribunal ha resuelto que es procedente el pago.

⁴⁴⁴ Memorial de Demanda, ¶ 1075.

⁴⁴⁵ Memorial Pre-Audiencia Empalme, ¶186 (Pretensiones de Empalme), inciso I.

⁴⁴⁶ Memorial de Cierre Empalme, ¶121. La Demandante refiere en este punto al ¶27 del mismo Memorial, mas en el mismo no precisa la ubicación del reconocimiento atribuido al Ing. Cámara.

⁴⁴⁷ Contestación a la Demanda, ¶ 2456 (Pretensiones), inciso H.

⁴⁴⁸ Memorial Pre-Audiencia CFE, ¶ 72 (Pretensiones), inciso I.

⁴⁴⁹ Memorial de Cierre CFE, capítulo XII (“PETITORIOS”), PRIMERO.

⁴⁵⁰ *Ibidem*.

583. No obstante lo señalado en el párrafo anterior, que se refiere a los Gastos Financieros en general, la extrema generalidad y falta de argumentación que caracteriza los planteamientos de ambas Partes en sus distintos memoriales, según se desprende de sus respectivas posiciones, dificulta seriamente la capacidad del Tribunal para determinar (1) a qué obligaciones de pago les son aplicables Gastos Financieros en caso de incumplimiento; (2) la fecha en que deben empezar a correr los Gastos Financieros según el tipo de incumplimiento; y (3) la tasa de interés aplicable, dependiendo del supuesto aplicable conforme a la citada definición de “Tasa de Gastos Financieros”.
584. Consecuentemente, habida cuenta de la existencia de la problemática señalada en párrafos anteriores, imputable a las omisiones de las Partes al formular sus pretensiones en relación con Gastos Financieros, el Tribunal analiza a continuación aquellas cuestiones referidas en páginas anteriores de este Laudo, respecto de las cuales el Tribunal ha considerado procedentes las pretensiones de la Demandante y el pago respectivo, para resolver lo conducente en relación con los Gastos Financieros reclamados por la Demandante.

Reintegro del Importe Ejecutado de la Carta de Crédito HSBC

585. Si bien el Tribunal resolvió en este Laudo que la ejecución de la Carta de Crédito HSBC por parte de CFE fue violatoria del Contrato y dicha violación revistió una especial gravedad⁴⁵¹, independientemente de que como consecuencia de ello proceda el reintegro del Importe Ejecutado de la misma, o sea la cantidad total de USD \$ 13,627,892.00 dólares, el Tribunal considera improcedente condenar a CFE a pagar Gastos Financieros sobre dicho importe, en virtud de que Empalme no repuso dicho Monto Ejecutado.
586. Independientemente de no ser procedente el pago de Gastos Financieros sobre el Importe Ejecutado de la Carta de Crédito HSBC por las razones antes señaladas, el Tribunal determina que la Demandada debe reintegrar a la Demandante la cantidad de USD \$ 13,627,892.00 dólares, dentro de los 30 (treinta) Días siguientes a la fecha en que le sea notificado por la LCIA el presente Laudo Final.

Gastos por la Ejecución de la Carta de Crédito HSBC

587. Asimismo, la Demandante incurrió en gastos relacionados con la ejecución de la Carta de Crédito HSBC, por un total de USD \$51,195.45 dólares; de los cuales, USD

⁴⁵¹ Párrafos 244 y 245, entre otros, de este Laudo Final.

\$37,762.14 dólares corresponden a comisión liquidada por la entidad emisora (HSBC) y USD \$ 13,433.31 dólares corresponden a gastos de SWIFT.

588. En virtud de que los gastos a que se refiere el párrafo precedente fueron consecuencia de la ejecución de la Carta de Crédito HSBC, que fue violatoria del Contrato, el Tribunal también determina que, independientemente de no ser procedente el pago de Gastos Financieros sobre el importe de dichos gastos, por las razones antes señaladas, la Demandada debe pagar a la Demandante la cantidad total de USD \$ 51,195.45 dólares, dentro de los 30 (treinta) Días siguientes a la fecha en que le sea notificado por la LCIA el presente Laudo Final⁴⁵².

Reembolso de retención conforme al Quinto Convenio Modificatorio

589. En relación con la reclamación de la Demandante por concepto de reembolso de la cantidad de USD \$337,128.97 dólares, retenida por CFE a Empalme de conformidad con la Cláusula Tercera del Quinto Convenio Modificatorio, correspondiente a avance de obra no reconocido, el Tribunal concluyó que toda vez que el Certificado de Aceptación Provisional fue emitido el 26 de marzo de 2019, Empalme quedó liberada de realizar las pruebas pendientes en los términos del Contrato, con las consecuencias correspondientes que incluyen, entre otras, la obligación de CFE de reembolsar a Empalme la cantidad referida.
590. Consecuentemente, la Demandada debe reembolsar a la Demandante la cantidad total de USD \$ 337,128.97 dólares, dentro de los 30 (treinta) Días siguientes a la fecha en que le sea notificado por la LCIA el presente Laudo Final⁴⁵³.
591. Asimismo, en virtud de la omisión de la Demandada en reembolsar a Empalme la cantidad retenida una vez que la Demandante quedó liberada de la obligación de realizar las pruebas y por tanto dejó de ser justificada la retención respectiva, el Tribunal también determina que la Demandada deberá pagar a Empalme los Gastos Financieros que resulten sobre la cantidad de USD \$ 337,128.97 dólares, a partir del 27 de marzo de 2019, día siguiente a la fecha de emisión del Certificado de Aceptación Provisional, aplicando la Tasa de Gastos Financieros que arriba quedó definida.

Trabajos Adicionales

592. Respecto a este rubro, la Demandante reclamó el pago de ciertos trabajos adicionales, no previstos en el Contrato, que fueron realizados por Empalme; de los cuales: (a) los

⁴⁵² Párrafos 248 y 249 de este Laudo Final.

⁴⁵³ Párrafo 504 de este Laudo Final.

más importantes consistieron en obras civiles para el mejoramiento de suelo en la zona del equipo GVRC número 1; y (b) en el incremento de la longitud de las pilas para los cimientos de la Central. Dichos trabajos tuvieron un costo total de USD \$3,348,527.30 dólares, del cual la cantidad de USD \$937,921.76 dólares fue el costo de los trabajos de mejoramiento de suelo y la cantidad de USD \$2,410,605.54 dólares fue el costo del incremento de la longitud de las pilas.

593. El Tribunal determinó que los trabajos referidos no estaban incluidos dentro del alcance del Contrato, pero fueron ejecutados con base en la decisión de la Demandada del cambio de sitio y, en consecuencia, el costo de dichos trabajos debe ser cubierto por la Demandada; y, por tanto, CFE debe pagar a Empalme la cantidad total de USD \$ 3,348,527.30 dólares, dentro de los 30 (treinta) Días siguientes a la fecha en que le sea notificado por la LCIA el presente Laudo Final⁴⁵⁴.
594. Asimismo, en virtud de la falta de pago por parte de la Demandada, de los Trabajos Adicionales arriba precisados, el Tribunal también determina que la Demandada deberá pagar a Empalme Gastos Financieros sobre la cantidad de USD \$ 3,348,527.30 dólares, a partir del día siguiente a la fecha de conclusión de los trabajos referidos, a la Tasa de Gastos Financieros que arriba quedó definida.

Trabajos Adicionales Reconocidos

595. La Demandante también reclamó el pago de ciertos trabajos adicionales, no previstos en el Contrato y con un costo total de USD \$109,299.58 dólares, que fueron realizados por Empalme; de los cuales: (a) los trabajos de implementación de transferencia rápida tuvieron un costo de USD \$100,713.46 dólares; y (b) los trabajos de implementación de modo isla de la Central tuvieron un costo de USD \$8,586.12 dólares.
596. El Tribunal determinó que, tomando en cuenta que existe conformidad de las Partes respecto a la procedencia del pago por CFE por concepto de los trabajos referidos, los mismos deben considerarse como aceptados y pendientes de pago por CFE; razón por la cual, el Tribunal también determina que CFE debe pagar a Empalme la cantidad total de USD \$109,299.58 dólares, dentro de los 30 (treinta) Días siguientes a la fecha en que le sea notificado por la LCIA el presente Laudo Final⁴⁵⁵.
597. Asimismo, en virtud de la falta de pago por parte de la Demandada, del importe de los Trabajos Adicionales Reconocidos arriba precisados, el Tribunal también determina

⁴⁵⁴ Párrafos 523 a 525 de este Laudo Final.

⁴⁵⁵ Párrafo 506 de este Laudo Final.

que la Demandada deberá pagar a Empalme Gastos Financieros sobre la cantidad de USD \$109,299.58 dólares, a partir del día siguiente a la fecha de conclusión de los trabajos referidos, a la Tasa de Gastos Financieros que arriba quedó definida.

Acuerdo 25.5 / Gestión de personal y administración de oficinas

598. El Tribunal tomó nota de que en virtud del numeral 3.3 del Acuerdo 25.5 existe un reconocimiento de la Demandada respecto a la obligación de CFE de cubrir a Empalme la cantidad de USD \$6,950,822.24 dólares por concepto de gestión de personal y de administración de oficinas locales de campo, más sus costos financieros a la tasa de gastos financieros, por un monto de USD \$163,861.91 dólares, mas no obstante ello ambas cantidades continúan pendientes de pago por CFE y forman parte de las reclamaciones de Empalme⁴⁵⁶.
599. El Tribunal determina que, en virtud de que la Demandada ha reconocido la obligación de CFE de cubrir las cantidades referidas en el párrafo anterior, y no obstante ello el pago respectivo continúa pendiente, CFE debe pagar a Empalme, dentro de los 30 (treinta) Días siguientes a la fecha en que le sea notificado por la LCIA el presente Laudo Final:
- a. la cantidad de USD \$6,950,822.24 dólares, por concepto de gestión de personal y de administración de oficinas locales de campo; y,
 - b. la cantidad de USD \$163,861.91 dólares, por concepto de costos financieros aplicables al impago de la cantidad anterior, a la tasa de gastos financieros.
600. Asimismo, en virtud de la falta de pago por parte de la Demandada, de las cantidades arriba precisadas, el Tribunal también determina que la Demandada deberá pagar a Empalme Gastos Financieros, sobre ambas cantidades, a partir del 10 de julio de 2020, día siguiente a la fecha en que Empalme entregó a Empalme la factura PCE150406E65, Folio 43⁴⁵⁷, a la Tasa de Gastos Financieros que arriba quedó definida.

Costos asociados a realización de pruebas, Clausula Tercera de Quinto Convenio Modificatorio

⁴⁵⁶ Párrafo 558 de este Laudo Arbitral; Contestación a la Demanda, ¶¶ 2354 y 2355; Anexo A-032 de Memorial de Demanda; Minuta de reconocimiento de reembolso por concepto de gastos, de 24 de junio de 2020.

⁴⁵⁷ Anexo A-032 de Memorial de Demanda.

601. El Tribunal Arbitral ha considerado los puntos de vista de ambas Partes⁴⁵⁸, así como las opiniones de sus respectivos peritos; y tomando en cuenta asimismo la postura de CFE al reiterar que “...no es posible reconocer ningún tipo de gasto incurrido por el Contratista relacionado con las Obras, razonables y documentados, en apego al Quinto Convenio Modificatorio, debido a que el Contratista no cumplió con sus obligaciones pactadas en el mencionado Convenio Modificatorio”⁴⁵⁹, fue injustificada al desconocer la totalidad de los costos asociados con la realización de pruebas, incurridos por Empalme, mientras que la pretensión de Empalme fue parcialmente procedente, determinó; el Tribunal acepta tal efecto el desglose presentado por el perito Cámara Anzures⁴⁶⁰, conforme al cual los costos asociados con la realización de pruebas, incurridos por Empalme durante el período comprendido del 27 de mayo de 2019 y el 26 de septiembre de 2019, importan un total de USD \$1,214,852.45 dólares y el Tribunal determina que deben ser cubiertos por la Demandada⁴⁶¹.
602. Consecuentemente, en virtud de todo lo anterior el Tribunal determina que la Demandada debe pagar a la Demandante la cantidad total de USD \$1,214,852.45 dólares; y, asimismo, la falta de pago de dicha suma por parte de CFE hace procedente el pago de Gastos Financieros.
603. Empero, considerando también que a la luz de todas las determinaciones anteriores del Tribunal conforme a este Laudo Final, también resultan saldos a favor de CFE por otros conceptos, el Tribunal determina al respecto que las Partes deben proceder a la compensación de sus respectivos créditos y CFE debe pagar a Empalme el saldo que resulte a cargo de CFE su cargo dentro de los 30 (treinta) Días siguientes a la fecha en que le sea notificado por la LCIA el presente Laudo Final; CFE deberá pagar Gastos Financieros sobre el saldo que resulte a su cargo, a partir del 27 de septiembre de 2019, día siguiente al final del período respecto al cual fueron considerados los gastos asociados antes referidos, a la Tasa de Gastos Financieros que arriba quedó definida.

XIII. COSTOS DEL ARBITRAJE.

604. Las Partes formularon en sus Memoriales de Cierre sus respectivas pretensiones en relación con los “Costos de Arbitraje” y “Costos Legales” a que se refieren los

⁴⁵⁸ Memorial de Demanda, ¶¶ 1019 y 1028; Memorial de Cierre Empalme, ¶¶ 41-45; Contestación a la Demanda, ¶¶ 2380 y 2381; Dictamen GPS I, sección 6.2.2, ¶¶ 201-206; Dictamen Pericial Ing. Cámara Anzures, ¶¶ 865, 923-929, 931.

⁴⁵⁹ Oficio de CFE RGROS-123/2020 de fecha 21 de mayo de 2020, Anexo A-090 del Memorial de Demanda.

⁴⁶⁰ Dictamen Pericial Ing. Cámara Anzures, ¶ 932.

⁴⁶¹ Párrafos 534 a 538 de este Laudo Final;

Artículos 28.1 y 28.3 del Reglamento, en los términos manifestados por cada una de ellas en dichos Memoriales, que se resumen a continuación.

Posición de Empalme

605. La Demandante manifiesta que ante la ausencia de un acuerdo entre las Partes sobre la distribución de costos, de conformidad con el Reglamento corresponde al Tribunal fijar la condena de costas que resulte, y formula diversas manifestaciones en relación con las circunstancias que considera debe considerar el Tribunal para tal efecto, y enlista los conceptos a que Empalme pretende tener derecho y se resumen a continuación, manifestando que los gastos y costas respectivos deben ser cubiertos por CFE, que además debe pagar gastos financieros sobre el importe de los mismos, calculados de conformidad con la Cláusula 10.2 del Contrato.⁴⁶²

a) Honorarios legales de Galicia Abogados, S.C.

De inicio de representación a conclusión Audiencia: MXN \$9,968,207.00

Prima de éxito estimada con base en monto de disputa: USD \$748,110.30

b) Pagos LCIA⁴⁶³: GBP £254,750.00

c) Honorarios Dictámenes Periciales

Dictámenes GPS I y II (A—001 y AP.002)⁴⁶⁴: USD \$352,109.89

Dictamen C. Lappee (AP-003): EUR €65,300.00

Dictamen H2O (AP-004): EUR €43,050.00

d) Gastos de la Audiencia

Comunicación visual presentación para Audiencia: MXN \$94,500.00

Servicio de alimentos durante la Audiencia: MXN \$74,040.00

Servicio de estenografía durante Audiencia: MXN \$28,750.00

Servicios de administración de Audiencia (ICC): EUR €2,500.00

⁴⁶² Memorial de Cierre Empalme, ¶¶ 117-121.

⁴⁶³ Incluye registro, honorarios Árbitro de Emergencia, Cuotas LCIA y honorarios Tribunal Arbitral.

⁴⁶⁴ Incluye Dictamen GPS I, Dictamen GPS II, Audiencia y gastos de Audiencia a reembolsar.

Traslados y hospedaje peritos y testigos: MXN \$142,222.54

EUR €2,482.00

e) Otros costos por ejecución Carta de Crédito HSBC,

Arbitraje de Emergencia y Arbitraje

Traducción Dictámenes Periciales AP-003 y AP-004: MXN \$215,074.00

Avales OHL-SENERMEX: USD \$1,692,506.43

Costos internos

Viajes de funcionarios de Empalme para Audiencia: EUR €8,077.12

Atención del arbitraje por funcionarios de Empalme⁴⁶⁵: MXN \$32'510,082.14

Posición de CFE

606. El planteamiento de la Demandada es sumamente escueto y se limita a la explicación de cada uno de los conceptos cuyo costo reclama y a continuación se resumen, a los que agrega “*los costos que se estén generando con motivo de la tramitación del presente Arbitraje*”, que por su naturaleza no cuantifica, y la petición de que “... *el Tribunal Arbitral ordene a las Demandantes (sic) el pago de todas las costas por representación legal y costas de arbitraje en que ha incurrido la Comisión en la parte proporcional de aquellas pretensiones que le sean negadas por carecer de acción para ejercerlas*”.⁴⁶⁶

a) Prestación de servicios profesionales: MXN \$2'897,937.45*

b) Dictamen Pericial Ing. Lorenzo José Cámara Anzures: MXN \$7'430,000.00*

c) Videgrabación y Transcripción Audiencia: MXN \$28,750.00

d) Traducción e interpretación simultánea en Audiencia: MXN \$42,500.00

e) Costos administrativos LCIA: GBP £208,000.00

* A esta cantidad se debe sumar el impuesto al valor agregado (IVA).

⁴⁶⁵ Nota de pie de página en el Memorial de Cierre Empalme, en tabla de ¶ 123: “*Estos costos corresponden a las horas dedicadas por funcionarios de EMPALME en el seguimiento y preparación del Arbitraje. Estos costos fueron determinados con base en las formulas (sic) y costos de hora de cada una de las empresas consorciantes.*”

⁴⁶⁶ Memorial de Cierre CFE, ¶¶ 167-1172 y Petitorio Segundo.

Determinación del Tribunal Arbitral

607. El Tribunal Arbitral ha tomado en cuenta las manifestaciones y pretensiones expuestas por las Partes en el Memorial de Cierre Empalme y en el Memorial de Cierre CFE, en relación con las “Costas Arbitrales” y “Costas Legales” a que se refieren los Artículos 28.1 y 28.3 del Reglamento; y asimismo, en observancia de lo dispuesto por el Artículo 28.4 de este último, a fin de resolver lo conducente el Tribunal ha tenido presente el principio general de que los costos deben reflejar el éxito o el fracaso relativo de las Partes; y asimismo, el Tribunal Arbitral ha tomado en cuenta la conducta de las Partes en el arbitraje y su cooperación en el procedimiento.
608. Según se desprende de los Memoriales de Cierre de las Partes, las “Costas Arbitrales” a que se refieren los Artículos 28.1 y demás aplicables del Reglamento suman un total de GBP £462,750.00 (cuatrocientas sesenta y dos mil setecientas cincuenta libras esterlinas), en virtud de que Empalme cuantificó las “Costas Arbitrales” reclamadas en GBP £254,750.00 (doscientas cincuenta mil setecientas cincuenta libras esterlinas), y CFE cuantificó las suyas en GBP £208,000.00 (doscientas ocho mil libras esterlinas).
609. En relación con lo anterior, el Tribunal Arbitral ha tomado en consideración el hecho de que la conducta observada por la hoy Demandada ante la hoy Demandante en relación con las diversas cuestiones surgidas de la relación contractual de las Partes, y particularmente el rechazo de CFE respecto de las solicitudes de pago formuladas por Empalme con motivo de los servicios prestados por esta de conformidad con el Contrato, y la ejecución unilateral de la Carta de Crédito HSBC, obligaron a Empalme a presentar su Solicitud de Arbitraje y a formular su Petición de Medidas de Emergencia, no sólo para hacer valer sus derechos mediante la primera, sino también para evitar mediante la segunda afectaciones adicionales a las ya sufridas por Empalme con motivo de la ejecución de la Carta de Crédito HSBC por parte de CFE.
610. Asimismo, en relación con las acciones emprendidas por la Demandante, referidas en el párrafo anterior, el Tribunal Arbitral advierte que Empalme prevaleció sustancialmente en el Procedimiento de Emergencia y, además, las Medidas Cautelares concedidas a Empalme en el Laudo del Árbitro de Emergencia fueron confirmadas por el Tribunal Arbitral, como parte de las actuaciones relativas a este arbitraje, mediante la Orden Procesal No. 2, referida en este Laudo Final.
611. Finalmente, por lo que hace a la conducta de las Partes en el arbitraje y su cooperación en el procedimiento, el Tribunal considera que ambas se condujeron de manera apropiada y cada una de ellas hizo valer de buena fe y de manera razonable sus

respectivos derechos y puntos de vista, observando además ambas una actitud cooperativa en relación con las determinaciones y disposiciones del Tribunal Arbitral.

612. Además de lo anterior, ha quedado en evidencia, conforme al desahogo de las actuaciones relativas a las cuestiones controvertidas a resolver en relación con las pretensiones de las Partes,⁴⁶⁷ que la Demandante fue sustancialmente exitosa en el arbitraje haciendo prevalecer, total o parcialmente, la mayor parte de las pretensiones planteadas en sus Memoriales, como se desprende de lo determinado al respecto por el Tribunal en los diversos capítulos y secciones de este Laudo Final. En este sentido, se actualiza lo dispuesto en el Artículo 28.4 del Reglamento, que establece que el Tribunal “... decidirá tanto sobre las Costas Arbitrales como sobre las Costas Legales basándose en el principio general de que las costas deben reflejar el éxito y el fracaso relativo de las partes en el laudo, en el arbitraje o en otras cuestiones, salvo que el Tribunal Arbitral considere, atendiendo a las circunstancias, que la aplicación de dicho principio general sería inapropiada ...”. El Tribunal no identifica razón alguna para apartarse de este principio.
613. Por otra parte, el Tribunal está consciente de que resulta muy difícil realizar una asignación aritmética de las costas entre las partes atendiendo a los distintos factores mencionados.
614. Considerando todo lo anterior, el Tribunal Arbitral determina y decide, respecto a las “Costas Arbitrales” y las “Costas Legales” a que se refieren los Artículos 28.1 y 28.2 del Reglamento, que la Demandada deberá absorber las mismas en un 80% (ochenta por ciento) y la Demandante deberá absorber el 20% (veinte por ciento) de las mismas.
615. Las Costas Arbitrales netas (diferentes a las Costos Legales u otros costes incurridos por las Partes por cuenta propia) han sido determinados por la Corte de la LCIA, de conformidad con el Artículo 28.1 del Reglamento de Arbitraje, de la siguiente manera:

Cuota de Registro:	GBP £1,750
Cuota de Registro de Solicitud de Árbitro de Emergencia:	GBP £8,000
Honorarios del Árbitro de Emergencia:	GBP £20,000
Costes Administrativos de la LCIA:	GBP £41,177.16
Honorarios y gastos del Tribunal:	GBP £349,868.94
Costes totales del arbitraje:	GBP £420,796.10
Estos honorarios y gastos están sujetos a IVA.	

⁴⁶⁷ Capítulo XI de este Laudo Final (CUESTIONES CONTROVERTIDAS A RESOLVER).

616. De estas costas, la Demandante ha pagado GBP £255,573.85, lo que incluye la Cuota de Registro, la Cuota de Registro de Solicitud de Árbitro de Emergencia, los depósitos transferidos, y los intereses devengados y la Demandada ha pagado GBP £225,823.85, lo que incluye los depósitos transferidos, y los intereses devengados. Por lo tanto, se ha recibido de las Partes un total de £481,397.70, de las cuales £420,796.10, más IVA por un monto de £60,601.60, han sido utilizados para pagar las Costas Arbitrales. Cualquier monto restante de los fondos será devuelto por la LCIA a las Partes en las proporciones que fueron pagados, de conformidad con el Artículo 28.7 del Reglamento de Arbitraje.
617. En cuanto a las “Costas Legales” a que se refieren los Artículos 28.3 y demás aplicables del Reglamento, que se precisan en el Memorial de Cierre Empalme y en el Memorial de Cierre CFE, conforme a lo decidido en los párrafos precedentes la Demandada deberá pagar a Empalme el 80% (ochenta por ciento) de las costas que reclama la Demandante en su Memorial de Cierre;⁴⁶⁸ sin embargo, el Tribunal determina que además de no haber sido acreditados no son razonables y por tanto resultan improcedentes y se rechazan los “costos internos” que pretende la Demandante por concepto de “*Costos internos correspondientes a la atención del Arbitraje por funcionarios de Empalme y sus consorciantes*”⁴⁶⁹ y asimismo rechaza la pretensión de la Demandante⁴⁷⁰ de que CFE pague Gastos Financieros sobre las condenas que se impongan a la Demandada por concepto de Costas Arbitrales y Costas Legales.

XIV. DECISIÓN.

618. Por las razones expuestas, el Tribunal resuelve:
- A). Con respecto al vencimiento de la Garantía Operativa estipulada en la Cláusula 20.1 del Contrato, el Tribunal resuelve que la fecha de vencimiento fue el 2 de julio de 2019.
 - B). Sobre la ejecución de la Carta de Crédito HSBC por parte de la Demandada, el Tribunal resuelve que Comisión Federal de Electricidad la ejecutó en

⁴⁶⁸ Memorial de Cierre Empalme, párrafo 121 y, además, únicamente el concepto contenido en el primer cuadro de la tabla que forma parte del ¶ 123 de dicho Memorial.

⁴⁶⁹ Memorial de Cierre Empalme, segundo cuadro de la tabla contenida en ¶ 123 del mismo.

⁴⁷⁰ Memorial de Cierre Empalme, ¶ 121.

incumplimiento de las disposiciones del Contrato. En consecuencia, la Demandada deberá reintegrar a Proyecto CCC Empalme I, S.A.P.I. de C.V. la cantidad de USD \$13,627,892.00 (Trece millones seiscientos veintisiete mil ochocientos noventa y dos dólares 00/100), moneda de curso legal de los Estados Unidos de América.

- C). Respecto de la pretensión de Proyecto CCC Empalme I, S.A.P.I. de C.V. de que le sean cubiertos los gastos inherentes a la ejecución indebida de la Carta de Crédito HSBC por Comisión Federal de Electricidad, el Tribunal resuelve en línea con lo anterior que la Demandada deberá cubrir a la Demandante la cantidad de USD \$51,195.45 (Cincuenta y un mil ciento noventa y cinco con 45/100 dólares), moneda de curso legal de los Estados Unidos de América, por concepto de la comisión de ejecución (USD \$37,762.14 dólares), y gastos SWIFT incurridos (USD \$ 13,433.31 dólares).
- D). Los costos reclamados por Proyecto CCC Empalme I, S.A.P.I. de C.V. identificados como avales de garantía de incumplimiento y los intereses devengados pero no pagados por la cantidad de USD \$1,692,506.43 dólares, se rechazan por ser improcedentes.
- E). En relación con la pretensión de Comisión Federal de Electricidad en el sentido de que Proyecto CCC Empalme I, S.A.P.I. de C.V. incumplió sus obligaciones de atender las Deficiencias Menores, el Tribunal resuelve que la Demandante cumplió con sus obligaciones de atención, salvo por las que se expresan en el párrafo siguiente.
- F). El Tribunal resuelve que quedaron pendientes de atención por Proyecto CCC Empalme I, S.A.P.I. de C.V. las Deficiencias Menores identificadas como DM-45, DM-49, DM-321, DM-322, DM-338, DM-345, DM-352, DM-353, DM-399, DM-416, DM-436, DM-437, DM-448, DM-453, DM-457, DM-474, DM-475, DM-487, DM-517, DM-532, DM-535, DM-547, DM-554, DM-556, DM-558, DM-559 y DM- 571, por un valor total de USD \$819,828.81 (Ochocientos diecinueve mil ochocientos veintiocho con 81/100 dólares), moneda de curso legal de los Estados Unidos de América.
- G). Por lo que respecta a los Reclamos de Garantía que Comisión Federal de Electricidad señala no fueron atendidos por Proyecto CCC Empalme I, S.A.P.I. de C.V., el Tribunal resuelve que la Demandante cumplió con sus obligaciones de atención, salvo por las que se expresan en el párrafo siguiente.

- H). El Tribunal resuelve que quedaron pendientes de atención por Proyecto CCC Empalme I, S.A.P.I. de C.V. 10 (diez) Reclamos de Garantía identificados como RG-19, RG-21, RG-22, RG-24, RG-82, RG-180, RG-181, RG-182 y RG-183, por un valor total de USD \$31,466.78 (Treinta y un mil cuatrocientos sesenta y seis con 78/100 dólares), moneda de curso legal de los Estados Unidos de América.
- I). En relación con la pretensión de Proyecto CCC Empalme I, S.A.P.I. de C.V. de que Comisión Federal de Electricidad le reintegre el monto retenido al celebrar el Quinto Convenio Modificatorio, el Tribunal resuelve que la Demandada debe entregar a la Demandante la cantidad de USD \$337,128.97 (Trescientos treinta y siete mil ciento veintiocho con 97/100 dólares), moneda de curso legal de los Estados Unidos de América.
- J). Sobre la pretensión de Proyecto CCC Empalme I, S.A.P.I. de C.V. de que le sean cubiertos los costos por trabajos adicionales incurridos con motivo del mejoramiento de suelo en la zona de equipo GVRC número 1 y el incremento de la longitud de las pilas para los cimientos de los equipos de la Central, el Tribunal resuelve que Comisión Federal de Electricidad deberá pagar a la Demandante la cantidad total de USD \$3,348,527.30 (Tres millones trescientos cuarenta y ocho mil quinientos veintisiete con 30/100 dólares), moneda de curso legal de los Estados Unidos de América).
- K). En adición a lo resuelto en el párrafo precedente, el Tribunal resuelve que Comisión Federal de Electricidad deberá pagar a la Demandante la cantidad total de USD \$109,299.58 (Ciento nueve mil doscientos noventa y nueve con 58/100 dólares), moneda de curso legal de los Estados Unidos de América), que la Demandada ha reconocido adeudar a la Demandante por concepto de trabajos relacionados con el modo isla de la Central y la implementación de la transferencia rápida de media tensión.
- L). En adición a lo anterior, Comisión Federal de Electricidad deberá pagar a la Demandante la cantidad de USD \$7,114,684.15 (Siete millones ciento catorce mil seiscientos ochenta y cuatro con 15/100 dólares), moneda de curso legal de los Estados Unidos de América, por concepto de gestión de personal y de administración de oficinas locales de campo (USD \$6,950,822.24 dólares) más sus costos financieros a la tasa de convenida (USD \$163,861.91 dólares) que la Demandada ha reconocido adeuda a la Demandante, derivado del Acuerdo 25.5, Apartado 3.2.

- M). En relación con el reclamo de Proyecto CCC Empalme I, S.A.P.I. de C.V. de que le sean cubiertos los costos asociados con la realización de Pruebas de Desempeño, el Tribunal resuelve que Comisión Federal de Electricidad deberá pagar a la Demandante un total de USD \$1,214,852.45 (Un millón doscientos catorce mil ochocientos cincuenta y dos 45/100 dólares), moneda de curso legal de los Estados Unidos de América.
- N). Respecto de la pretensión de Proyecto CCC Empalme I, S.A.P.I. de C.V. de que le sean cubiertos los costos derivados de las reclamaciones de terceros bajo el Acuerdo 25, el Tribunal resuelve que no es procedente el reclamo.
- O). En relación con la pretensión de Proyecto CCC Empalme I, S.A.P.I. de C.V. de que se bifurque el procedimiento y se declare procedente la terminación del Contrato, otorgándose para ello el Acta de Entrega Final y el Finiquito correspondiente, el Tribunal rechaza la solicitud por improcedente.
- P). Sobre las peticiones de condena de costos del presente arbitraje planteadas por Proyecto CCC Empalme I, S.A.P.I. de C.V. y por Comisión Federal de Electricidad, el Tribunal condena a Comisión Federal de Electricidad a pagar la cantidad de GBP £204,459.08 (doscientas cuatro mil cuatrocientas cincuenta y nueve con 08/100 libras esterlinas), equivalente al 80% (ochenta por ciento) del total de las Costas Arbitrales arriba referidas, cubiertas por Empalme a la London Court of International Arbitration.
- Q). Comisión Federal de Electricidad deberá pagar a Empalme el 80% (ochenta por ciento) de las Costas Legales referidas en el párrafo 616 del Capítulo XIII anterior, con excepción de los Costos Legales que pretende la Demandante y se especifican en el siguiente párrafo.
- R). Se rechaza la pretensión de la Demandante, de que la Demandada pague a Empalme, como parte de las Costas Legales arriba referidas, los “*costos internos*” que pretende la Demandante por concepto de “*atención del Arbitraje por funcionarios de Empalme y sus consorciantes*”, asociados con el tiempo destinado por ejecutivos, administrativos, de investigaciones, por asesoría de equipo legal interno, por la administración del procedimiento, así como la participación de testigos en el arbitraje.

- S). Finalmente, se rechaza la pretensión de Empalme de que CFE le pague Gastos Financieros sobre las condenas impuestas a la Demandada por concepto de Costas Arbitrales y Costas Legales.
- T). Recapitulando las condenas de pago, se ordena a Comisión Federal de Electricidad pagar a Proyecto CCC Empalme I, S.A.P.I. de C.V. las cantidades siguientes:

a) Reintegro de la Carta de Crédito HSBC:	USD \$ 13,627,892.00
b) Gastos por la ejecución de la Carta de Crédito HSBC:	USD \$ 51,195.45
c) Reembolso Retención Quinto Convenio Modificatorio:	USD \$ 337,128.97
d) Trabajos Adicionales:	USD \$ 3,348,527.30
e) Trabajos Adicionales Reconocidos:	USD \$ 109,299.58
f) Gestión de personal-administración de oficinas:	USD \$ 6,950,822.24
g) Costos financieros relacionados con Acuerdo 25.5:	USD \$ 163,861.91
h) Costos Asociados a Pruebas conforme al Quinto Convenio Modificatorio:	USD \$ 1,214,852.45
i) Costas Arbitrales:	GBP 204,459.08
j) Costas Legales:	USD \$ 880,176.15 EUR € 97,127.30 MXN \$ 8'418,235.82
Las cantidades anteriores, que debe pagar la Demandada, se reducen por los conceptos siguientes que resultan a cargo de la Demandante:	
1) Deficiencias Menores:	USD \$ 819,828.81
2) Reclamos de Garantía:	USD \$ 31,466.78

- U). La falta de pago oportuno de las cantidades indicadas en los párrafos anteriores generará Gastos Financieros hasta la fecha de pago, a la Tasa de Gastos Financieros que quedó definida en este Laudo Final.
- V). Se rechazan las demás pretensiones y reclamos.

Sede del Arbitraje: Ciudad de México.

Fecha: 14 de marzo de 2023.

TRIBUNAL ARBITRAL



Eduardo Siqueiros Twomey
Árbitro



Oscar Vásquez del Mercado Cordero
Árbitro



Fernando Estavillo Castro
Presidente